universal registration document 2019

SUEZ

universal registration document 2019

INCORPORATION BY REFERENCE

Pursuant to Article 19 of European Regulation No. 2017/1129 of June 14, 2017, this Universal Registration Document incorporates the following information by reference:

- with regard to the fiscal year ended December 31, 2018: annual report, consolidated financial statements and the corresponding Statutory Auditors' report, appearing in chapters 9, 20.1 and 20.2 respectively of the Reference Document registered with the AMF on April 5, 2019 under number D. 19-0281;
- with regard to the fiscal year ended December 31, 2017: annual report, consolidated financial statements and the corresponding Statutory Auditors' report, appearing in chapters 9, 20.1 and 20.2 respectively of the Reference Document registered with the AMF on April 10, 2018 under number D. 18-0313.

AMF | AUTORITÉ DES MARCHÉS FINANCIERS

This Universal Registration Document has been filed on April 9, 2020 with the AMF, as competent authority under Regulation (EU) 2017/1129, without prior approval pursuant to Article 9 of the said regulation.

The Universal Registration Document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market if supplemented by an offering memorandum and, if applicable, a summary and any amendments to the Universal Registration Document. The whole is approved by the AMF in accordance with Regulation (EU) 2017/1129.

This document is a free translation of the French language Universal Registration Document that was registered with the Autorité des marchés financiers *(the "AMF") on April 9, 2020. It has not been approved by the AMF. This translation has been prepared solely for the information and convenience of shareholders of SUEZ. No assurances are given as to the accuracy or completeness of this translation, and SUEZ assumes no responsibility with respect to this translation or any misstatement or omission that may be contained therein. In the event of any ambiguity or discrepancy between this translation and the French Universal Registration Document, the French version shall prevail.*

Contents

Notice

The Company = SUEZ
The Group = the Company and its subsidiaries
The Universal Registration Document serves as the Management Report (see Concordance Table)

The items of the Annual Financial Report are clearly identified in the summary subsections using the AFR pictograms AFR

1 Persons responsible for information, information from third parties, expert reports and approval by the competent authority

1.1 Person responsible for the Universal Registration Document

Bertrand Camus, Chief Executive Officer of SUEZ.

1.2 Declaration of the person responsible for the Universal Registration Document

"I hereby certify, after taking all reasonable measures to that effect, that the information contained in this Universal Registration Document is, to the best of my knowledge, accurate and does not include any omission that would distort its substance.

I certify that, to the best of my knowledge, the financial statements have been drawn up in accordance with applicable accounting standards and give a true and fair view of the assets, financial position and results of the Company, as well as of that of all the companies included in the consolidation, and that the Management Report enclosed presents a true and fair picture of the way in which business is developing, the results, and the financial position of the Company, and all the companies included in the consolidation, and that it describes the main risks and uncertainties they face."

Bertrand Camus
Chief Executive Officer

1.3 Declaration or report from an expert

None.

1.4 Declaration relating to information from third parties

None.

1.5 Declaration without prior approval

The declaration without prior approval is shown on page 1 of this Universal Registration Document.

2 Statutory Auditors

ERNST & YOUNG et Autres – Principal Statutory Auditor

1/2, place des Saisons
92400 Courbevoie – Paris-La Défense 1 – France

Appointed by decision of the Combined Shareholders' Meeting of December 21, 2007 and reappointed by the Shareholders' Meetings of May 24, 2012 and then May 17, 2018 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2024 to approve the financial statements for the fiscal year ending December 31, 2023. Represented by Stéphane Pedron [1].

MAZARS – Principal Statutory Auditor

61, rue Henri Regnault – Tour Exaltis
92400 Courbevoie – France

Appointed by decision of the Combined Shareholders' Meeting of July 15, 2008 and reappointed by the Shareholders' Meeting of May 22, 2014 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2020 to approve the financial statements for the fiscal year ending December 31, 2019. Represented by Dominique Muller and Achour Messas [2].

The Shareholders' Meeting of May 12, 2020 will be asked to renew the term of office of principal Statutory Auditor, Mazars, for a term of six years, until the end of the Ordinary Shareholders' Meeting called to approve the financial statements in 2026 for fiscal year ending December 31, 2025.

CBA – Deputy Statutory Auditor

61, rue Henri Regnault – Tour Exaltis
92400 Courbevoie – France

Appointed by decision of the Combined Shareholders' Meeting of July 15, 2008 and reappointed by the Shareholders' Meeting of May 22, 2014 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2020 to approve the financial statements for the fiscal year ending December 31, 2019.

Its reappointment will not be submitted for approval to the Shareholders' Meeting of May 12, 2020, as Article L. 823-1-I 2nd paragraph of the French Commercial Code *(Code de commerce)* now only requires the appointment of a deputy Statutory Auditor when the principal Statutory Auditor is an individual or single-member company.

The fee schedule for the Statutory Auditors is found in Note 26 to the Consolidated Financial Statements, in chapter 18.1 of this Universal Registration Document.

(1) ERNST & YOUNG et Autres is a member of the Compagnie Régionale des Commissaires aux comptes de Versailles.
(2) MAZARS is a member of the Compagnie Régionale des Commissaires aux comptes de Versailles.

3 Risk factors

3.1 Main risks

Among the many risks identified and monitored by the Group, those described below are likely to have a significant impact on the Group's earnings, financial position, business or image. These risks are reviewed annually when the Group builds its risk mapping.

These risks are categorized below into emerging risks, strategic risks and operational risks. In accordance with European Regulation EU 2017/1129 of June 14, 2017, in each category, the biggest risk in terms of exposure appears first.

The level of risk considered is a residual risk, after taking into account risk management systems and how well they are managed, without actually being a net risk level, meaning taking specific action plans into account that can be set up on a case-by-case basis.

These risks are assessed using a three-level exposure scale: moderate risk, significant risk and critical risk.

Emerging risks	Exposure level
Risks related to the Covid-19 public health crisis	Significant-SUEZ is currently monitoring and assessing the situation

Strategic risks	Exposure level
Risk of economic downturn	Significant
Risk of lower volumes and prices	Significant
Risks related to delays in implementing regulatory compliance measures	Significant
Risks associated with the competitive environment and delays in innovation	Significant
Risks related to the Group's transformation and performance plan	Significant
Reputation and opinion risk	Significant
Risks related to changes in environmental regulations and to their implementation	Moderate

Operational risks	Exposure level
Risk of not achieving synergies and integration	Significant
Construction risk	Significant
Risks related to cybersecurity, data protection and IT system outages	Significant
Environmental and industrial risks	Moderate
Health, security and safety risks	Moderate
Hiring, skills and succession risks	Moderate
Risks related to service continuity	Moderate

3.1.1 Emerging risks

Risks related to the COVID-19 public health crisis

Impacts from the Covid-19 public health crisis are not quantifiable as of the date of this Universal Registration Document, but they could have a material impact on the Group. The main risk factors related to this pandemic are already being monitored. They are primarily related to health, safety and security risk, risk related to service continuity, risk related to an economic downturn, and construction risk, which are mentioned in sections 3.1.2 and 3.1.3 below.

As a result, in terms of measures taken by authorities in different countries where the Group operates, the Group may face impacts related to employee health and availability. This is why the Group has made business continuity a priority, since SUEZ provides essential services for people around the world (supplying drinking water, wastewater treatment, waste recycling, and recovery). SUEZ also cares about the health of its employees. SUEZ is putting in place business continuity plans in line with public authorities designed to safeguard employee health, and to maintain the Group's ability to operate.

In addition, in relation to the public health crisis, the Group may have to deal with decisions that government authorities make in the various countries in which the Group operates. These decisions could have an impact on the Company's revenue and financial position, if applicable: closure of certain industrial sites (as this was the case in China in the first few months of the year), the decision to defer water invoice payments (as proposed in France), and staff unavailability (leading to a delay in facility construction).

Lastly, even if the Group is still currently operating normally in some countries and for some industrial sectors the Group is exposed to, the measures taken to contain Covid-19, particularly in Europe, North America and Latin America, could have an impact on raw material volumes and prices if the measures persist, and could impact the Company's revenue and financial position as a result.

3.1.2 Strategic risks

Risk of an economic downturn

The level of public debt in several developed countries is very high, interest rates have hit record lows and a number of uncertainties are leading to an economic slowdown. Public or private organizations such as the IMF, OECD, the European Central Bank or the Blackrock Institute are encouraging global coordination of monetary and fiscal policies, including coordinating fiscal stimulus measures on an international scale to limit the impacts of the next major recession.

This type of recession would have a significant impact on some of the Group's business activities, such as WTS or the Recycling and Recovery business in both France and Northern Europe, which primarily includes industrial or commercial customers. Customer credit risk could also increase as a byproduct of an economic downturn.

On the other hand, certain businesses are less vulnerable and more resilient in a crisis – the regulated "water" business in North America or in Chile as well as public service delegations in France.

Risks of decline in volumes and prices

In the supply of drinking water in some developed countries, a decrease is being observed in volumes consumed mainly due to social factors and because water is a resource that needs to be preserved. For example, in France, the Group estimates that billed water volumes are declining structurally by approximately 1% per year on average. To respond to this decline in volumes, the Group is achieving productivity gains, providing in certain contracts for a tariff share independent of the volumes consumed, developing higher value-added services, particularly by supporting public authorities in their obligation to meet changing regulations, and making tariff adjustments. However, if these developments are insufficient in the future to offset the reduced volume, there may be a negative impact on the Group's activity, earnings and outlook.

Water volumes consumed also depend on weather changes. As a result, exceptional rainfall could negatively impact the Group's activity and earnings.

Regarding rates, regulatory changes, such as the proposed Act amending the Water Code in effect in Chile, which is currently under review, could also have an impact on prices, margins, investments, operations and consequently the Group's business activities, earnings and outlook. Pricing risk is also significant in Spain where municipalities require price reductions or call into question contractual indexation formulas. The Group carries out most of its business activities under long-term contracts with terms of up to 30 years or more. The conditions for performing these long-term contracts may be different from those that existed or that were anticipated at the time the contract was entered into and may change its financial balance. SUEZ makes every effort to obtain contractual mechanisms that allow it to adjust the balance of the contract in response to changes in certain significant economic, social, technical or regulatory conditions. However, not all long-term contracts entered into by the Group have such mechanisms. Moreover, when the contracts entered into by the Group contain such adjustment mechanisms, it is not certain that the contractual partner will agree to implement them or that they will be effective in re-establishing the financial balance of the contract. The absence or potential ineffectiveness of the adjustment mechanisms provided for by the Group in its contracts or the refusal of a contractual partner to implement them could have a negative impact on the Group's financial position, earnings and outlook.

Risks related to delays in implementing regulatory compliance measures

Laws and regulations have been enacted over the last few years that have created corresponding compliance obligations and risks if the Group is slow to implement compliance action plans.

In France, the law on transparency, anti-corruption and economic modernization, also known as the Sapin 2 Law, primarily aims to fight corruption, which covers a wide range of practices including inappropriate management behavior, corruption, competition rule violations, data confidentiality and improper handling of confidential information. Violating this law would expose the Group to fines or criminal sanctions from the French Anti-corruption Agency (AFA) as well as to major risk to its image and reputation. The Group identified specific vigilance areas concerning partnerships and intermediaries in certain geographic areas: Africa, the Middle East, Central and Eastern Europe, Latin America.

The law relating to the duty of vigilance of parent companies and contractors requires setting up an effective Vigilance Plan to identify and prevent risks of human rights and environmental violations. The law applies not only to the company's own business activities, but also to the business activities of the companies controlled directly or indirectly by the Group as well as subcontractors and suppliers the Group has an established business relationship with. Violating this law would expose the Group to legal penalties: formal notice, financial penalties, incurring civil liability, as well as significant risk to its reputation. The Group's very high number of suppliers and subcontractors requires the Group to be particularly vigilant.

The General Data Protection Regulation (GDPR), a European Union regulation, aims to both increase safeguards for data subjects by processing their personal data and to make those who process the data more accountable. In case of violations of GDPR, the Group would be subject to administrative penalties, criminal penalties, civil liability and negative impact on its image and reputation. The increase in the number of complaints as well as fines imposed on offender companies by regulatory authorities on the one hand, plus the amount of data generated by the Group and the growing threat in terms of cybersecurity on the other, all contribute to an increased risk for the Group.

Embargo measures or economic sanctions have been set up by many jurisdictions. They could change, or new measures could be applied. If the Group experiences a delay in complying with these changes, it would expose the Group to administrative penalties as well as have a negative impact on its image and reputation.

Risks associated with the competitive environment and delays in innovation

The Group's core businesses continue to face strong competition from major international operators and, in some markets, from "niche" players. New industrial companies (equipment manufacturers, builders) and financial players (Asian conglomerates) have been adopting aggressive strategies to invest in markets or reposition themselves within the value chain, by diversifying into the service business. In addition, the Group also faces competition from public sector operators in some markets, such as the semi-public companies in France. Finally, some cities may want to retain or assume direct management of water and waste services (notably in the form of public control, *régie)* instead of depending on private operators in both France and Spain. This strong competitive pressure, which could increase in a context of consolidation among private entities (in the waste sector in Europe, for example), may put pressure on the commercial development and prices of the services offered by the Group, which are exacerbated in (i) the waste treatment sector in some countries, where the Group could see the profitability of its facilities fall due to a reduction in the utilization rate resulting from the development of overcapacity and in (ii) the water treatment engineering sector due to the ramping up of new Spanish and South Korean players, in the context of a contraction of the European municipal market related to the worsening financial health of local public entities and a risk of a lack of competitiveness.

Regarding contractual risks, the contracts entered into by the Group with public authorities make up a significant share of its revenues. However, in most of the countries in which the Group operates, including France, Spain and Morocco, local public entities have the right, under certain circumstances, to amend or even terminate the contract unilaterally, subject to compensation. If a contract is unilaterally canceled or amended by the contracting public authority, the Group may not be able to obtain compensation that fully offsets the resulting loss of earnings. Moreover, the Group does not always own the assets that it uses in its operations under a public service delegation contract (primarily through public service concessions or leases). SUEZ cannot guarantee that the contracting authority will renew each of its existing public service delegation contracts or that the financial conditions of the renewal will be the same as the initial delegation. This situation could negatively impact the Group's operations, financial position, earnings and outlook.

Within the Group, the risk of losing competitiveness mainly impacts the construction businesses, as well as the AMEI region (Africa, Middle East, India). This risk is in large part due to an increase in and worldwide spread of competition, particularly from Spanish and Chinese competitors, as well as competitors from other Asian and emerging countries. The Group cannot guarantee it will be agile enough to adapt if needed in terms of market intelligence, technological innovation, competitive costs, performance and quality. This risk can result in not being able to win planned projects, or in a decrease in the margins necessary to stay competitive, especially in the Design Build Operate (DBO) business.

In addition, in order to offer comparable or better performing services than those offered by competitors, or to win new markets, the Group may be led to innovate and develop new technologies and services, particularly in the "digital" domain. This would help generate additional revenue, but would also be a source of new risks – time-to-market could be too long for new products and services, there could be delays in developing a "digital" offering compared to the competition, or uncontrolled development costs could have an adverse impact on the Group's financial position and earnings.

Risks related to the Group's transformation and performance plan

The Group has launched a transformation plan that includes several components:

- reorganizing into multi-service Business Units;
- setting up smart and digital solutions;
- launching transformation projects in France in the operational entities like in the support functions;
- beginning infrastructure transformation projects for the Group IT and Procurement functions.

At the same time, the Group started a multi-annual operating performance improvement plan that involves optimizing operating, purchasing and overhead costs. To carry out this performance plan, the Group needs to completely transform its operating model in critical areas such as governance or talent management.

Any transformation delay, and specifically in advancing the projects described above, could adversely affect the Group.

Additionally, even if transformation plans have been rolled out, there is still a risk that they will not end up being as effective as hoped, will not save as much money as planned or will not grow the business enough.

Reputation and opinion risk

Since the advent of the single SUEZ brand, and given the global reach of the Group's business activities, the reputation risk the

Group faces after any incident occurs in one of its operating entities, such as water supply accidentally being cut off, alleged wrongdoing, an ethics problem, fraud, a cyber-attack, is higher. Other events like repeated beach closures due to wastewater treatment plant overflows after heavy rain could also heighten risk. This risk could be increased by whistleblowers being active on social media where information is shared widely and immediately. This reputation risk is compounded by using temporary workers, which happens more frequently during periods of transformation and is less due to operating procedures.

In addition, business activities specific to the Group (water treatment, incineration, etc.) pose risks to its reputation in relation to a number of sensitive societal issues: health, air quality, water quality, micropollutants, plastic use, management of common goods and access to essential services. At WTS, the risk of Legionnaires' disease is identified and closely monitored. Regarding water quality, the Group cannot control privately owned interior pipes that may be the source of some quality issues with tap water, for instance, such as the presence of lead. Any overstepping of the regulatory standard for drinking water, whatever its origin, could have a negative impact on the Group's image. Lastly, actions by staff, Corporate Officers or representatives violating the ethical principles affirmed by the Group could expose it to legal and civil penalties as well as lead to loss of reputation.

Risks related to changes in environmental regulations and to their implementation

Climate change regulations are on the rise: in France, the Energy Transition for Green Growth Act of August 17, 2015; in Europe, "The Climate and Energy Package"; and more recently, in 2018, "The Clean Energy Package" and amendment of the Directive on the EU-Emissions Trading system. Some European states announced their intention to tax thermal waste recovery activities, which specifically affects the Solid Recovered Fuel (SRF) market or the Refuse Derived Fuel (RDF) market. Such measures would have a significant impact on the Group's waste treatment business model in Europe.

These regulations do not include the waste management sector in an emissions tax mechanism, even though some Group business activities related to energy production or secondary raw materials (Solid Recovered Fuel, chemical products) could be eligible for it. At this stage, different scenarios are possible, with positive and negative outcomes depending on the scenario considered. The Group's most energy-hungry activities will nevertheless be increasingly covered around the world by carbon pricing mechanisms, such as in the United Kingdom, where industries using more than 6 GWh of energy per year are subject to a tax per ton of greenhouse gas emitted, or in Australia, where the Australian Safeguard Mechanism establishes an authorized emissions cap for the facilities that emit the most greenhouse gas.

Furthermore, the work in progress for the EU Action Plan for Sustainable Finance Growth, which aims to create a classification system by 2022 that can determine economic activities that can be considered environmentally "sustainable" could, over time, help focus investments on only one part of the waste management and recovery business, according to its results.

Generally speaking, the Group's businesses are subject to environmental protection, public health, and safety rules that are increasingly strict and differ from country to country. These rules apply to water discharge, drinking water quality, waste treatment, long-term monitoring of landfills, soil and water table contamination, air emissions quality, compliance of equipment and chemical products, and greenhouse gas emissions.

Despite managing these regulatory risks within the Group, there are still many risks that result from the vagueness of some regulatory provisions or the fact that regulatory bodies can amend their enforcing instructions and that major developments in the legal framework may occur. In addition, the relevant regulatory bodies have the power to bring administrative or legal proceedings against the Group, which could lead to the suspension or revocation of permits or authorizations the Group holds, injunctions to cease or abandon certain activities or services, fines, civil penalties, or criminal convictions, which could negatively and significantly affect the Group's public image, activity, financial position, earnings and outlook. These administrative authorizations can be difficult to obtain or renew and often involve a long, costly and unpredictable procedure. Finally, the conditions attached to authorizations and permits that the Group has obtained could be made substantially more stringent by the relevant authorities.

Amending or strengthening regulatory provisions could result in additional costs or investments for the Group. Subsequently, the Group might have to reduce, temporarily interrupt, or even discontinue one or more activities with no assurance that it will be able to offset the corresponding losses. As a result, the "National Sword" policy put in place by China in 2017, which aimed to limit or prohibit imports of certain types of recyclable waste into the country (plastic, paper and other materials) had an impact on sales volumes and prices for recyclable materials in Europe. In 2018, an amendment to the Australian Heavy Vehicle National Law requires every participant in the vehicle transport supply chain to ensure transportation activities are safe. At the end of 2018 still, the New South Wales Australia Environment Protection Authority revoked the resource recovery order that authorized the use of Mixed Waste Organic Outputs in compost for land use. The decision at least temporarily puts an end to the agricultural use of compost and could, in the medium-term, significantly impact the Group's Australian waste treatment business.

The applicable regulations involve investments and operating costs not only for the Group, but also for its customers, and particularly contracting local or regional public authorities, notably due to compliance obligations. Failure by the customer to meet its obligations could injure the Group as operator and harm its reputation and ability to grow.

3.1.3 Operational risks

Risk of not achieving synergies and integration

Acquisitions, and particularly the purchase of GE Water (which became the WTS business unit) on September 29, 2017, could involve risks related to integration and not achieving the gains the Group hoped for.

Another major possible cause would be difficulties creating the desired growth synergies due to the market not being as enthusiastic as anticipated to the Group offering combined services with WTS.

Difficulty in generating the expected synergies and reductions of costs in purchases or support functions, for example, and the emergence of unexpected liabilities or costs also contribute to these risks. The occurrence of one or more of these risks could have a negative impact on the operations, financial position, earnings or outlook of the Group.

Construction risk

The Group is involved in the design and construction of certain installation projects.

These risks are related to the completion of fixed-price turnkey contracts. Under the terms of such contracts, the subsidiaries agree to engineer, design and build operation-ready plants for a fixed price. Actual expenses resulting from performing a turnkey contract can vary substantially from initial projections for a variety of reasons, such as:

- unforeseen increases in the cost of raw materials, equipment or labor;
- not obtaining the necessary construction or operating licenses or authorizations;
- unexpected construction conditions;
- delays due to weather and/or natural phenomena (particularly earthquakes, floods and pandemics) ;
- not achieving expected performance or unforeseen technical difficulties;
- non-performance by partners, suppliers or subcontractors.

The terms of a fixed-price turnkey contract do not necessarily make it possible to increase prices to reflect elements that were difficult to predict when the bid was submitted. For these reasons, it is impossible to determine with certainty the final costs or margins of a contract at the time the bid was submitted, or even at the start of the contract's performance phase. If costs were to increase for any of these reasons, the subsidiaries carrying out this type of business could see their margins shrink, potentially causing them to sustain a significant loss on the contract.

Engineering, Procurement and Construction projects can encounter problems that may entail a reduction in revenues, disputes or lawsuits. These projects are generally complex, and require major purchases of equipment and large-scale project management. Schedule delays could occur, and the subsidiaries could encounter difficulties in design, engineering, the supply chain, construction and/or installation. These factors could have an impact on their ability to complete certain projects by the original deadline.

Certain terms of the contracts entered into require the client to provide particular design or engineering-related information, in addition to the materials or equipment to be used for the project. These contracts may also require the client to compensate them for additional work done or expenses incurred, if (i) the client changes its instructions, or (ii) the client is unable to provide them with adequate design or engineering information or appropriate materials or equipment for the project. In such cases, these subsidiaries usually negotiate financial compensation with their clients for the additional time and money spent due to the client's failure to meet its contractual obligations. However, the Group cannot guarantee that it will receive sufficient compensation to offset the extra costs incurred, even if it takes the dispute to court or arbitration.

The Group, as part of the guarantees given to cover its subsidiaries' commitments, may be required to pay financial compensation if it breaches contractual deadlines or other contractual stipulations. For example, the new facility's performance may not comply with project specifications, a subsequent accident may invoke the Group's civil or criminal liability, or other problems may arise (now or in the future) in the performance of the contract that may also significantly impact the Group's operating income.

Risks related to cybersecurity, data protection and IT system outages

Information systems are critically important in supporting all the Group's business processes.

Increasingly, they are interconnected and cut across business segments. Any failure could lead to loss of business, loss of data or breach of confidentiality, and could negatively impact the Group's operations, financial position and earnings.

The implementation of new applications may require considerable development, with risks relating to development costs, quality and deadlines.

Risks due to cybersecurity and malicious intrusions into information systems are increasing. Cyber-attacks are getting larger, more sophisticated and potentially costly. These risks are a threat to data security and can lead to acts of fraud or customer relationship management (CRM) data breaches. They also heighten the vulnerability of supervisory control and data acquisition (SCADA) systems, which could result in, for instance, losing partial control of a water or waste treatment plant. Rapid technological changes – and especially the rise of the Cloud and the internet of Things – have increased the level of potential threats as well as the risk of losing control of the Group's IT systems. The lack of efficient patch management processes or vulnerability management processes may lead to the development of security gaps, especially when equipment and software are not updated or when vulnerabilities identified are not corrected.

Insufficient investments or updates in IT equipment or infrastructure make the Group vulnerable to system failures or outages.

Office and industrial Information Technology is increasingly connected to the internet, which in turn makes the systems increasingly open and vulnerable. Not only has the risk of fraud grown, but corporate and personal data breaches have as well, resulting in an additional risk of not complying with the General Data Protection Regulation (GDPR), which could lead to considerable financial penalties.

Group employees having a relatively low level of IT security maturity is also a compounding factor for these risks.

Environmental and industrial risks

The facilities that the Group owns or manages on behalf of third parties carry risks to the surrounding environment (air, water, soil, habitat and biodiversity) and may pose risks to the health of consumers, local residents, employees, or even subcontractors. These health and environmental risks, which are governed by strict national and international regulations, are regularly monitored by the Group's teams and by the public authorities. These changing regulations with regard to environmental responsibility and environmental liabilities carry the risk of increasing the Company's vulnerability in relation to its activities. This vulnerability must be assessed for older facilities (such as closed landfills) and for sites in operation. It may also involve damage caused to habitats or species.

As part of its activities, the Group must handle, or even generate, hazardous products or by-products. This is the case, for example, with certain chemicals used in water treatment. In waste treatment, some Group facilities treat special industrial or medical waste that may be toxic or infectious.

In waste management, gas emissions to be considered include greenhouse gases, gases that induce acidification of the air, noxious gases and dust. In water activities, potential air pollutants mainly include chlorine or gaseous by-products resulting from accidental emissions of water treatment products. Wastewater treatment and waste treatment activities can also cause odor problems or produce limited but dangerous quantities of toxic gas or micro-organisms.

In the absence of adequate management, the Group's activities could have an impact on water in the natural environment: leachates from poorly monitored landfills, discharges of heavy metals into the environment, and aqueous discharges from flue gas treatment systems at incineration plants. These various types of emissions could pollute water tables or watercourses. Wastewater treatment plants discharge decontaminated water into the natural environment. For various reasons, these plants may temporarily fail to meet discharge standards in terms of organic, nitrogen, phosphorus or bacteriological load.

Soil pollution issues could arise in the event of accidental spills of stored hazardous products and liquids, leaks from processes involving hazardous liquids and the storage and spread of sludge.

Non-compliance with these standards can lead to contractual financial penalties or fines.

There are risks related to the operation of waste treatment facilities, water treatment facilities, water supply networks and certain services rendered in industrial settings. These risks can lead to industrial accidents such as fires or explosions, design faults, and external events beyond the Group's control (actions by third parties, landslides, earthquakes, floods, hurricanes, etc.). Such industrial or health accidents may cause injuries, loss of human life, significant damage to property or to the environment, as well as business interruption and loss of output.

Although the Group has premium civil liability and environmental risk insurance, it may still be held liable above the amount of its coverage or for items not covered in the event of claims involving the Group. Moreover, the amounts provisioned or covered may be insufficient if the Group incurs environmental liability, given the uncertainties inherent in forecasting expenses and liabilities related to health, safety and the environment. Therefore, the Group's liability for environmental and industrial risks could have a significant negative impact on its public image, activity, financial position, earnings and outlook.

Specific risks related to operating high-risk sites ("Seveso" sites)

According to Directive 2012/18/EU of July 4, 2012, SUEZ operates Seveso-designated sites within the European Union.

SUEZ operates other hazardous industrial sites for which it is committed to applying the same high industrial safety standards.

Any incident at these sites could cause serious harm to employees working at the site, neighboring populations and the environment, and expose the Group to significant consequences. The Group's insurance coverage could turn out to be insufficient. Any such incident could, therefore, have a negative impact on the public image, activity, financial position, earnings and outlook of the Group.

Health, security and safety risks

The Group is very aware of the risks of deteriorations in employees' and subcontractors' health. It takes measures to protect their Health and Safety and closely monitors the relevant indicators (frequency and severity rate) in each business unit. It also takes great care to remain in compliance with legal and regulatory Health and Safety provisions at its various sites. However, it may be confronted with occupational illnesses that could lead to legal action against the Group and, potentially, to the payment of damages, which could be significant.

Personnel working at water production and distribution facilities and on hazardous industrial waste treatment sites may be exposed to chemical risks.

Many Group vehicles travel on public roads, resulting in risks of traffic accidents.

In the area of security, and despite security measures taken by the Group as part of the operation of its water and waste facilities, the possibility remains that the facilities could be affected by malicious acts and acts of terrorism, with consequences for public health or harm to employees, equipment or sites. In addition, some of the Group's employees work or travel in countries where the risks of terrorism or kidnapping may be high, especially in emerging countries in which the Group intends to grow its international business activities.

The occurrence of such acts could have a significant negative impact on the public image, activity, financial position, earnings and outlook of the Group.

Hiring, skills and succession risks

The Group employs specialists and executives with a broad range of expertise applied to its various businesses. In order to prevent the loss of key skills, the Group must anticipate labor shortages in certain businesses. In addition, the Group's international growth and changes in its businesses require new know-how and a great deal of mobility among its staff, particularly its executives.

In particular, SUEZ identified risks such as shortages in critical skill sets *(e.g.* sales teams for the industrial sector, large scale project managers or Big Data experts) and in new business activities for the Group, such as smart cities or digital technologies, difficulties defining succession plans that can have an influence on operational continuity or project management, and an aging workforce due to demographics in some countries.

The Group's success depends upon its ability to map existing skills and to hire, train and retain a sufficient number of employees, including managers, engineers, technicians and sales professionals, with experience in industrial markets who have the required skills, expertise and local knowledge. Competition for this kind of profile is strong.

Risks related to service continuity

These risks are first and foremost related to water service interruptions caused by events such as accidental pollution or a lack of maintenance. For business activities related to recycling and waste recovery, the Group could also be impacted by service interruptions at collection or treatment centers.

The main risks identified concern Chile and Australia. Due to the single "SUEZ" brand, the impact on the Group's reputation would be amplified by such events. Contractual penalties could also apply.

In general, in a world where climate change and its proven impacts are rapidly gaining momentum, increased drought frequency and intensity could lead to a localized decrease in the availability of groundwater and surface water resources. This increasing scarcity of water resources, in combination with demographic and metropolitanization pressures, could reduce or interrupt production capacity. Moreover, the increase of drought phenomena could increase the risk of saltwater intrusion into groundwater.

Likewise, the increasing occurrence of significant rainfall events, as well as an increase in their intensity, creates a growing risk in coming decades of flooding in Group-managed facilities, generating service interruptions and overloading storm sewer networks. Meanwhile, the disruption of transportation systems by flooding could affect power supply, waste collection and the delivery of reagents for water treatment.

Some Group companies depend on raw water, treated water or primary energy suppliers for their distribution activities. Such dependence is generally imposed by regulation or local technical configurations, leading to the de facto monopoly of these suppliers. It is always possible that such suppliers may fail to meet their obligations due to technical issues (breakdowns), pollution or for other reasons, causing a risk of service interruption.

3.2 Risk management and control within the Group

3.2.1 General framework for Group risk management and control

Management of the risks the Group is facing involves identifying and assessing such risks and putting in place the appropriate action plans and hedges.

The Group has adopted an integrated corporate risk management policy, which aims to provide a complete overview of the risk portfolio through the use of methods and tools common to all subsidiaries and functional departments.

The Chief Risk Officer (CRO) is responsible for coordinating this integrated approach. He is supported by a network of Risk Officers who are responsible for seamlessly and consistently executing the risk assessment and management techniques at the various subsidiaries. The network is headed by the Chief Risk Officer.

A risk-mapping process for the whole Group has been in place for several years. Risks are identified, classified by category (strategic, financial or operational), assessed (by significance, frequency, and exposure), and quantified wherever possible. The method for handling them is then reviewed, which provides information for action plans at different levels of the Company.

This process, which is overseen centrally by the Chief Risk Officer and at the subsidiaries by the network of Risk Officers, makes it possible, in particular, to draw up an annual summary of the major risks for the Group. It includes steps to select significant individual risks and, if applicable, aggregate homogeneous risks and to take into account possible links. The summary is discussed and validated by the Executive Committee.

The subsidiaries maintain responsibility for implementing the most appropriate risk management policy for their particular activities. However, certain trans-Group risks are directly managed by the corporate departments involved:

- within the Office of the General Secretary:
  - the Legal Department analyzes and manages the Group's legal risks, based, in particular, on periodic reporting from the subsidiaries and their network of in-house legal counsel,
  - the Internal Audit, Risk and Investments Department ensures:
    - that internal audits are conducted on all the Group's activities around the world. It proposes its annual audit plan based on an analysis of the operational and financial risks of Group companies. This audit plan is approved by General Management. The objectives of the internal audit are to assess the contribution of the audited entities in relation to their commitments, validate their risk analysis and control, assess their internal control system and verify that the Group's procedures, guidelines and charters are followed. At the end of every assignment, the Internal Audit Department communicates its conclusions and recommendations for corrective actions,
    - that the overall Enterprise Risk Management process is carried out and the networks/communities concerned are managed: Risk Officers, Contract Managers,
    - that the Group's and subsidiaries' main projects in terms of investments, acquisitions and disposals, in particular, are analyzed in collaboration with the Planning and Control Department and the Legal Department;
  - the Insurance Department, in conjunction with the subsidiaries, is the contracting authority for the Group's insurance programs for industrial and environmental damage, business interruption, and liability (third-party, professional, etc.). Specifically, it monitors risks of fire and machinery breakdown by implementing an annual prevention and protection program for the Group's key sites,
  - the General Secretary, acting as the Ethics Officer for the Group, is responsible for the prevention and management of ethical risks. He relies on the Ethics and Compliance Department, which identifies and manages risks related to ethics violations and compliance gaps. It also has a network of compliance officers;
- within the Finance Department, the Treasury and Capital Markets Department, together with the subsidiaries, analyzes the Group's main financial risks (interest rates, major currencies and banking counterparties), develops instruments for measuring positions and sets policy for hedging such risks. The Planning and Control Department performs critical analyses of the subsidiaries' actual and forecast financial performance through the monthly review of operating and financial indicators. It develops the Group's short- and medium-term financial forecasts and contributes to the analysis of development projects by the Group and its subsidiaries. The Internal Control Department has rolled out a documentation, improvement and annual internal control assessment program at the main subsidiaries of the Group in collaboration with the Group's functional and operational management teams. The Tax Department's primary responsibility is to identify and analyze the Group's tax risks. The Accounting and Consolidation Department ensures compliance with accounting standards;
- the Human Resources Department analyzes the main labor risks, gaps in terms of skills, corporate culture, and employee mobilization and engagement. It develops action plans for recruiting local talent and skills development. The Health and Safety Department monitors and ensures the prevention of occupational illnesses and accidents related to the Group's businesses. It ensures the implementation of warning and crisis management procedures within SUEZ Group entities to establish a culture of prevention at all levels, which further enhances the quality and continuity of operations;
- the Performance Department:
  - studies and monitors environmental and industrial risks and coordinates the actions needed to strengthen risk control and compliance with requirements in this area. To do so, it implements a schedule of environmental audits and coordinates a network of Environmental and Industrial Risk Officers

  charged with rolling out the environmental risk management policy uniformly and consistently at each main subsidiary,
  - studies the operating risks associated with the Group's production systems and assists the subsidiaries in resolving operational issues at their sites, establishes and distributes best practices and operational benchmarks to the subsidiaries, and prepares solutions for a certain number of emerging risks by developing suitable research programs;
- the IT Department analyzes and manages risks relating to IT systems to guarantee the availability, integrity and confidentiality of information;
- the Security Department: the Group has developed specific security know-how over a long period of time through various large projects in Central America, South America, Africa, the Middle East and Asia. Faced with increasingly complex and unstable security conditions, the Group has developed its own upstream analysis system for potential risks and an overall security management system based on scalable solutions that are adapted to the specific local and regional context. In this way, the Group continually analyzes unstable situations so as to identify early signs of deterioration. This internal system is operational, as we saw several times through the proactive management of crises particularly in Africa and the Middle East;
- the Engagement and Communications Department analyzes and manages primarily image and reputation risks and prepares and implements suitable crisis communication plans in connection with the subsidiaries. The Best Practices Charter of the SUEZ communications network reminds employees of the confidential nature of information held by some employees and the internal obligations relating to the dissemination of information.

In addition, the Treatment Infrastructures business line actively contributes to managing risks related to design and construction.

Aside from these functional departments, the Board of Directors is assisted by an Audit Committee whose assignments in terms of risks are as follows:

- obtain regular updates on the Group's financial position, cash position and significant commitments and risks;
- examine the risk control policy and the procedures selected to evaluate and manage these risks;
- evaluate the efficiency of the Group's internal control system.

The results for 2019 of the overall risk management policy were presented on October 25, 2019.

Internal control is implemented according to the risks identified within the Group's activities as part of the risk-mapping process.

3.2.2 Management of industrial and environmental risks

Controlling environmental and industrial risks is a priority for the Group. For this reason, a specific management policy for these risks was enacted in 2014. It addresses risks which may be of accidental or natural origin. They may be due to human or organizational factors, equipment accidents or malicious acts. The scope of this policy covers all types of pollution (air, soil, aquatic environments) and environmental nuisance (noise, vibration, odor, visual discomfort, etc.). It also covers environmental damage as well as property damage and personal injury caused by fire, explosion, machine breakage, natural disaster, the collapse of structures, etc.

In 2016, this policy was clarified to include the management of the cybersecurity risk for Industrial Control Systems, consistent with the IT Security policy.

This policy is consistent with the Global Risk Management, Health and Safety, and Security policies.

A structured management system ensures that the management principles it contains are applied across all business units internationally.

3.2.2.1 Governance

Within their organizations, SUEZ and each of its business units each appoint an Environmental and Industrial Risk Officer (EIRO) to ensure the coordinated functional management of these risks at every level of the organization. The Group EIRO reports to the Performance Department. This individual is responsible for coordinating the network of EIROs in the business units. Commitments are formalized with the business units or other operating entities based on the principle of subsidiarity with the aim of continuously improving the management of environmental and industrial risks. The annual Compliance Letter procedure is used to draft a report of each business unit's environmental and industrial risks, determine areas for improvement and related action plans, disclose significant risks identified and report on the measures taken as a result. Depending on the nature of the risk, action plans may be developed over one or more years. However, action plans seeking to mitigate significant risks must be developed within a limited time frame to minimize the risk of major accidents. This document is signed by the CEO of each business unit, based on the Compliance Memorandum of its EIRO.

3.2.2.2 Management Rules and Operational Rules

A series of management rules offer guidance on how to apply the SUEZ Environmental and Industrial Risk Management Policy. Compliance with local regulations is required in all cases. Any business unit, subsidiary or facility with industrial operations, and over which the Group has a dominant influence on technical operations, must comply with these management rules. They also apply to any service performed on behalf of a third party at their facilities.

The management rules make it possible to roll out the main components of the Environmental and Industrial Risk Management Policy in the business units and operating entities. The main components of the policy are as follows: organization, risk management, design, operation and modification of facilities, standards, reporting, training, subcontractor management, integration of new companies or operation agreements, management and communication of accidents and near accidents, as well as other actions. They also lay down the roles and responsibilities for its implementation and the monitoring systems in place.

In addition, a series of environmental and industrial operational rules define the mandatory rules for all Group operations. The business units' management systems must take into account and adhere to the principles of these operational rules.

The purpose of the operational rules is to enable operating entities or subsidiaries to check that the operations under their control comply with the Group's established criteria. Failure by existing entities or newly acquired companies to comply with the operational rules must be addressed through an action plan to return them to compliance within an appropriate time frame.

The operational rules are accompanied by Practical Guides that offer guidance and examples for the practical application of these rules. The practices are supplemented depending on accident analysis feedback in collaboration with insurance company claims experts.

A series of external training modules is available on the Group training platform to spread awareness of these operational rules. Group experts also organize face-to-face training sessions on this topic.

3.2.2.3 Control

The operating entities to which this policy applies must follow the SUEZ Environmental and Industrial Risk Management system and its three-step approach: risk identification; risk assessment; and implementation of risk management measures.

The operating entities must introduce an appropriate method (or a combination of different methods) to identify potential environmental and industrial risks associated with their activities or specific to their facilities. Several risk identification methods are accepted: internal audits, self-assessment questionnaires, hazard studies conducted as part of applications for authorization to operate, process risk studies, risk prevention programs carried out by third parties (*e.g.* specialized risk prevention companies on behalf of insurance companies), site visits by management or by functional departments, and integration or acquisition of new facilities.

In addition, audits are conducted by the Performance Department (including a general audit of the environmental and industrial risk management system and audits on selected operational sites). These audits are intended to verify the business units' ability to identify environmental and industrial risks, to determine measures for controlling such risks and to guarantee efficiency of these measures over time. Failure to apply the management rules and standards is reported to the appropriate management level for analysis and decision-making on the measures to be implemented.

A summary of the reported gaps is presented annually to the Group's General Management.

3.2.2.4 Crisis alert and management

A crisis alert and management procedure is in place to anticipate and manage accidents or any unforeseen and sudden events that may have a negative impact on the environment, operating or third party assets, business continuity or Group reputation, as well as associated impacts on employees and local residents. Such measures serve to ensure immediate and reliable communication about emergency situations to appropriate levels of the organization (alert) and to prepare and implement a "crisis organization" that is able to decide, communicate, and respond locally and globally, even in situations made worse by events. The procedure specifies the type of events that must be communicated through SUEZ's emergency stand-by team and the severity thresholds that should trigger an alert.

Each of the Group's subsidiaries has emergency plans in place that involve two modes of intervention: a local emergency stand-by team that issues the alert and mobilizes crisis management resources, and a dedicated crisis management system that can handle the crisis effectively over time. This system provides in particular for the creation of crisis management units that are capable of taking into account internal or external impacts, whether technical, social, health related, economic or reputational.

3.2.2.5 Consideration of feedback

Following an environmental or industrial accident, the operating entities must analyze the event to determine the facts and understand the technical, organizational and human causes leading to the event. This analysis allows management to take appropriate measures to prevent a reoccurrence; update the risk analyses and reassess the robustness of risk control measures; and improve understanding about safety issues and the Group's safety culture by sharing feedback.

In the case of severe accidents, a news flash is circulated throughout the organization by the EIROs and *via* a post on Yammer (the Group's internal social media network). A review panel may also be set up. Chaired by a representative of the Group's General Management, these panels aim to ensure that the causes of the accident have been correctly analyzed and appropriate corrective measures have been taken at the business unit level to prevent a repeat of such an accident; to propose any additional measures or investigations; to decide on possible actions at the Group level; to decide on the classification of the accident and the possible consequences for the people involved (employees and managers), and to decide on how to communicate about the event.

3.2.3 Management of IT risks

Development of major IT projects: the Group has introduced a policy for managing major IT projects and is progressively rolling out a method aimed at addressing any possible deviations.

Cybersecurity risk: this risk concerns the operation of industrial sites managed by the Group and the protection of data relating to the Group, its employees and its customers. Based on recommendations from a series of international standards, such as ISO 27000, and the guide on industrial systems cybersecurity published by the French National Information System Security Agency (ANSSI), the Group has defined a policy and set up a governance structure, a SOC [1] and a SIEM [2], and in 2017 hired a Group Chief Information Security Officer, an Industrial Control Systems Risk Officer and a Data Privacy Officer to analyze risks, set standards and ensure the Group remains in compliance with regulatory obligations. Local employees at the various BUs assist them in carrying out their duties. The cybersecurity action plan includes the following measures:

In order to enhance IT security management, the Group took out a comprehensive cybersecurity insurance policy covering all legal entities in mid-2018. New BUs have been added to the cybersecurity network and all BUs actively participate in the new dashboard. With regard to Operational Technology (OT), the Group has rolled out ten operation security rules at all the BUs that include a secure IT architecture model in compliance with local businesses and regulations.

The Group is also gradually applying a uniform security level. In 2018, SUEZ rolled out a cybersecurity crisis management governance structure throughout the entire Group. In 2019, the Group was able to test out this structure by conducting its second crisis exercise at some twenty industrial sites in three different countries. A SUEZ digital footprint monitoring and analysis solution was also developed. In 2019, the Group expanded its Cybersecurity Center of Expertise, founded in early 2018. It now assists the international BUs with security incidents and supports Group Security services with the BUs (SOC, ISSO, DPC, etc.).

The Group is continuing the employee outreach program launched in 2018 by rolling out a phishing simulation platform and videos raising awareness of cyber risks for all SUEZ employees. Regarding OT, after developing a list of critical sites, a cybersecurity readiness self-assessment grid and the Group's first employee outreach e-learning module, the Group launched a campaign to raise awareness of cybersecurity by airing videos showing real-life scenarios to the entire Group.

Rolling out Group tools such as the SIEM/SOC to monitor and make job postings, the network and Office 365 secure improved data monitoring and protection within the Group. The Group has been able to detect and stop several attempted attacks on the Group's infrastructure with these tools.

Lastly, SUEZ is continuing to roll out measures concerning the GDPR, including the review and roll-out of IT project risk analyses. This review and roll-out have been supplemented by a Privacy Impact Assessment for projects involving private data. An Insurance and Security plan, which includes GDPR requirements, has been drawn up and signed with suppliers. The Project Security methodology has been applied and includes data security from the project outset (Privacy by Design) as well as throughout the entire length of the project until production. The Group has also raised awareness and trained employees on the GDPR.

3.2.4 Ethics Program

Ethical values have always been a fundamental component of SUEZ's strategy and development. The Group pays particular attention to sharing and adhering to ethical values as well as applicable regulations. As a result, ethics and integrity are core components of the values SUEZ reaffirmed in its "Shaping SUEZ 2030" plan.

The Group also adheres to the Global Compact Initiative based on the ten United Nations Global Compact principles and is a Global Compact Advanced Level company. In addition, SUEZ is a member of the French division of Transparency International and *Entreprises pour les Droits de l'Homme* (Businesses for Human Rights).

SUEZ is making ethics an indispensable element of its overall performance improvement. Adherence to these values is essential in all the Group's activities, both in internal relationships within the Company and in its relationships with clients, partners, suppliers and all external stakeholders. For this purpose, the Group has set up a structured Ethics Program that includes a specific anti-corruption plan.

Managing the Ethics Program within SUEZ Group

The Group Executive Committee regularly monitors the Ethics Program and anti-corruption plan. At the Board of Directors level, it is monitored by its CSR, Ethics, Water and Sustainable Planet Committee, which is responsible in particular for ensuring that the necessary procedures to prevent and detect corruption and influence peddling are set up (for a description of the CSR, Ethics, Water and Sustainable Planet Committee along with its missions and activities, see chapter 14.4, section 3 of this Universal Registration Document). This Committee sends reports of its work to the Board of Directors.

The Group's Ethics Program is rolled out under the responsibility of the General Secretary, acting as the Group Ethics Officer, who relies on the Ethics and Compliance Department in order to achieve this mission. Note that the Group Head of Ethics and Compliance is a member of the Leadership Group, a group formed under the SUEZ 2030 plan, which includes members of the Executive Committee and around 70 members who review the Group's strategic objectives and help roll them out.

(1) SOC: Security Operations Center.
(2) SIEM: Security Information and Event Management.

The Ethics and Compliance Department coordinates a network of compliance officers who are responsible for ensuring that the program is implemented within their scope. As part of their duty, these compliance officers must ensure that employees are sufficiently aware of the program, and that questions and concerns about ethics are answered with sufficient independence.

The scope and composition of this network is reviewed on a regular basis to make sure it is in line with the Group's operational structure. As of December 31, 2019, there were 17 "first-tier" compliance officers covering all the Group's Business Units. Additionally, local compliance officers are appointed for Business Units that have a particularly large number of employees or that are spread out geographically. As of December 31, 2019, the entire network had a total of 75 people under the hierarchic or operational responsibility of the General Secretary, Group Ethics Officer.

Reference Documents

SUEZ's ethical values are defined in the SUEZ Ethics Charter. This Charter is available in nine languages (French, English, Spanish, German, Dutch, Czech, Italian, Russian and Polish) and supplemented by an Ethics How-To Guide. It takes into account applicable regulations, standards, and rules on ethics and professional conduct issued by international institutions (such as the Global Compact, the International Labour Organization Conventions and the OECD Guidelines for Multinational Enterprises).

These documents have been developed as a reference framework for all employees in terms of behavior and action, whether it be collective or individual.

In order to strengthen its anti-corruption plan, in 2015 the Group adopted a Code of Conduct entitled "Ethics Guide for Business Relationships", available in nine languages. This guide is signed by the Chief Executive Officer, like the Ethics Charter. This Code of Conduct was approved by the Board of Directors CSR, Innovation, Ethics, Water and Sustainable Planet Committee during its creation. It states that the Group has a zero-tolerance policy toward corruption and it defines and illustrates the different types of behaviors to prohibit as they are likely to characterize acts of corruption or influence peddling. Anti-corruption rules are also listed and illustrated in the guide in a detailed and practical way. This guide also handles conflicts of interest, the Group's policy on gifts and invitations as well as competition rules. In accordance with the requirements of the Sapin 2 Law, this Code of Conduct is included in the Internal Regulations of the entities concerned.

The Ethics Charter and how-to guides can be consulted by all Group employees on the SUEZ intranet site. These ethics documents are also provided to all employees who join the Group. Furthermore, new hires commit to adhere to these rules under the terms and conditions of their employment contract or *via* equivalent mechanisms if necessary. As a result, in 2019, around 9,000 employees received ethics documents and formally committed to complying with the Group's ethics principles.

In addition, procedures aiming to mitigate ethics risks, and especially corruption risk, have been defined and verification measures are in place:

- a specific procedure frames contract signings with business or institutional consultants. In particular, it defines due diligence measures to take prior to the conclusion of these contracts and prior approval mechanisms;
- due diligence measures are implemented when selecting co-investors, co-contractors and subcontractors;
- procedure for sponsorship initiatives define applicable sponsorship principles and prior approval mechanisms;
- a charter on Ethical and Responsible Lobbying was developed to serve as a reference to employees involved in representing the Group's interests.

Risk assessment

In accordance with Sapin 2 Law requirements, a corruption risk mapping was created in 2017.

This mapping was updated once again in 2019. It has been approved by the Group Executive Committee, then presented to the Board's CSR, Innovation, Ethics, Water and Sustainable Planet Committee.

Training

Face-to-face training and e-learning modules are rolled out on a regular basis to increase prevention of ethics risks and ensure employees are well versed in anti-corruption and anti-competition rules. This roll-out is based on training programs defined upstream. Employees that are the most exposed to risks are prioritized for training.

Consequently, throughout 2019, around 9,000 employees received training on ethics topics, and 5,000 of them were specifically trained on anti-corruption rules (mainly employees deemed to be sensitive).

The ethics whistleblower system

The Group has a system to collect and report Group rule violations. This system is open to all Group employees and third parties. It guarantees confidentiality and lack of retaliation against whistleblowers acting selflessly and in good faith. Note that some Group entities have also set up local systems specific to their needs.

In 2019, 147 emails with allegations of unethical behavior were received *via* the Group email (ethics@suez.com) and the Group entities' dedicated email addresses. On top of that, a large number of whistleblower reports were sent to other Group departments or senior managers first.

When ethical concerns arise, the Head of Ethics and Compliance and/or the concerned Ethics Officer is either involved directly or immediately notified. This individual can decide to examine them if necessary in close collaboration with the Legal and Human Resources departments. The most serious cases are subject to an internal audit or specific external audit.

Controls

The Group's Ethics Program is monitored as part of an annual compliance procedure. At this time, the Ethics Officers send a report on the application of the Ethics Program at their subsidiary to their General Management team as well as to the Group Ethics Officer and Group Head of Ethics and Compliance. A compliance letter signed by the Chief Executive Officer of each business unit or significant entity is also submitted to the Group Chief Executive Officer and the Group Ethics Officer. Lastly, the Group Ethics Officer produces an Annual Report on the Group's Ethics Program for the Group Chief Executive Officer and for the Chairman of the Board of Directors. It is then sent to the CSR, Innovation, Ethics, Water and Sustainable Planet Committee, which then reports on it to the Board of Directors.

The SUEZ ethics and anti-corruption program is also included in the Group's internal control system.

Lastly, the Internal Audit Department regularly examines how well and how effectively the Group's Ethics Program has been implemented. As a result, the annual internal audit plan, which is defined by the Executive Committee and approved by the Audit and Financial Statements Committee, schedules assessments of the Group's overall system in terms of Sapin 2 Law requirements as well as specific reviews of certain entities' Ethics and Compliance programs.

3.2.5 Management and Financing of Insurable Risks

The roll-out of the industrial risk management policy described in section 3.2.2 helps to further reduce the occurrence or effects of accidental events.

To limit the impact of certain events on its financial position, or to meet contractual or legal requirements, the Group has created dedicated insurance programs to cover its main risks of damage to property, civil liability, and personal insurance.

The policy for transferring risk to the insurance market is approved every year and updated as necessary in order to reflect not only changes in the Group, its activities and the risks it faces, but also changes in the insurance market.

The Insurance Department organizes the policy defined by the Group: selection of the brokers and insurers, monitoring of the policies and, if necessary, control of the prevention or protection policies. For this purpose, it works with a network of specialists or agents at the Group's subsidiaries.

In each of the traditional insurance domains (namely property damage and interruption of business, civil liability and employee benefits), the Group transfers risks to the insurance market or uses self-financing plans:

- the transfer of risk to the insurance market is performed as often as possible through Group-wide programs in areas that are considered strategic because of either the potential severity of the risks covered or the economies of scale generated by Group-wide programs;
- the financing of low or moderate intensity random risk relies mostly on self-financing schemes, particularly through risk retentions, or through the captive non-life reinsurance subsidiary SUEZ Ré, whose activities consist of reinsuring all or part of the risks transferred by SUEZ Groupe and its subsidiaries to non-life insurers. Its expert-led Technical and Financial Committees validate each commitment and monitor management transactions.

In 2019, the premiums (including taxes and retentions) relating to the main insurance programs established by the Group in the areas of asset protection (covering property damage and interruption of business) and third-party claims amounted to approximately 0.4% of Group consolidated revenues, considering the changes in scope.

Property damage and interruption of business

The protection of Group assets covers property the Group owns as well as property that it leases or that has been entrusted to it.

Facilities are covered by programs that are generally underwritten at the Group level. However, insurance policies are also taken out by subsidiaries and, under exceptional circumstances, by sites, if justified by contractual requirements. These local insurance policies are identified and checked by the Insurance Department.

The underwriting limits for property damage cover the maximum loss assessed for each site.

With respect to interruption of business resulting from property damage, the coverage periods take into account an estimate of the consequences of the total or partial shutdown of a site (repair period, amount of daily losses, additional expenses and redundancy).

Construction projects are covered by a "Construction All Risks" policy taken out by the project manager, the general contractor or the main company involved.

Civil liability

The Group's third-party civil liability is covered by various types of civil liability insurance.

General civil liability, product liability, professional liability or civil liability for environmental damage coverage fall under an insurance program underwritten and managed by SUEZ Groupe on behalf of its subsidiaries.

The maximum coverage under this policy was EUR 350 million in 2019.

Insurance for certain types of civil liability that correspond to legal obligations (vehicle fleet and workplace accidents) are covered by specific policies.

Employee benefits

In accordance with legislation currently in force and with company agreements, programs for protecting employees against the risk of accidents and medical costs are set up at the operating entity level. These programs may either be financed through retention based on capacity, or transferred to the insurance market. In France, mutual and insurance programs are largely consolidated and are subject to at least one review per year to analyze risks and trends, as well as to anticipate changes in the economic balance of the plans concerned.

3.3 Internal control procedures implemented within the Company

3.3.1 Group objectives and standards for internal control

3.3.1.1 Objectives

The aim of the internal control procedures implemented within the Group is to provide reasonable assurance that the applicable laws and regulations are complied with, and that accounting and financial information is reliable.

Generally speaking, it helps to safeguard assets and control and optimize operations. Like any control system, it can only provide reasonable assurance that the risks of error or fraud are completely under control or have been eliminated.

The Group adopted an integrated corporate risk management policy that aims to provide a complete overview of the risk portfolio through the use of methods and tools common to all subsidiaries and functional departments, as well as to put in place and follow up on action plans to manage those risks.

3.3.1.2 Reference framework

The Group internal control program was developed according to the "COSO" model promoted by the Committee of Sponsoring Organizations of the Treadway Commission and complies with the principles described in the reference framework supplemented by the application guide published by the French Financial Markets Authority (AMF) and updated by an AMF working Group on the Audit Committee (whose final report was published on July 22, 2010).

General risk management principles are consistent with professional standards (such as ISO 31000, the reference framework of the Federation of European Risk Management Associations (FERMA) and the practices it recommends).

3.3.2 Steering of operations and implementation of internal control and risk management objectives

3.3.2.1 Steering of operations

In terms of steering of operations, the Group's organization is based on the following principles, which form the general control framework in force within SUEZ.

- The Board of Directors establishes operational guidelines for the Group and oversees their implementation. In this regard, it tasks the Audit and Financial Statements Committee with (among other things) monitoring the internal control and risk management systems (see section 3.3.2.2 below). The Board deals with all issues concerning the proper running of the Company, deliberates and settles relevant matters, and carries out checks and inspections as it deems appropriate. The Chairman or Chief Executive Officer must provide each Director with all the documents and information required to carry out their duties;
- the Chief Executive Officer holds the most extensive powers to act, under all circumstances, on behalf of the Company. He exercises those powers within the limit of the corporate purpose and subject to the powers granted by law to Shareholders' Meetings and the Board of Directors, and to internal limits on executive powers;
- the Executive Committee is an advisory and decision-making body comprising the Chief Executive Officer and the seven Deputy CEOs in charge of the France region and Group operations; the North America region and President of Water Technologies & Solutions (WTS); the global Smart & Environmental Solutions business unit, Strategy and the Shaping SUEZ 2030 transformation plan; the APAC (Asia, Australia and India) and AMECA (Africa, Middle East, Central Asia) regions and Key Industrial accounts; the Northern Europe region; the Southern Europe region (Spain, Italy, Greece) and Latin America; and Finance, the General Secretary, the Group Head of Human Resources and the Head of Engagement and Communications. The Committee reviews the Group's main decisions and strategic

objectives and sets operational and performance objectives for the six regions and two global business units;

- the Performance Management Committee comprises the members of the Executive Committee, the Heads of the Business Units and the senior managers of certain support functions. Its role is to manage operating performance, business development, business-specific expertise and the Group's corporate culture;
- the Operations Committee is chaired by the Chief Executive Officer or the Deputy CEO in charge of Finance and also includes the General Secretary and the Deputy CEO in charge of the France region and Operations. Its role is to evaluate significant disposal or development projects for commitment decisions and to analyze the performance of specific projects in progress;
- the Treasury Committee, chaired by the Deputy CEO in charge of Finance, is the management body for financial risks;
- until December 31, 2019, the Group was organized according to four main segments (Water Europe, Recycling and Recovery Europe, International and WTS); these were in turn divided into 14 Business Units to which the Group's operating subsidiaries were linked. As of January 1, 2020, the Group is organized into three financial reporting segments (Water, Recycling and Recovery and Environmental Tech and Solutions). The new operating structure includes six Regions – France, North America, APAC (Asia, Australia and India), AMECA (Africa, the Middle East, Central Asia), Northern Europe and the Latin America and Southern Europe Region – and two global business units (Water Technologies & Solutions and Smart & Environmental Solutions).

  The Region and global business unit managers and the management teams of the operating subsidiaries are responsible, within their area of responsibility, for conducting business within the framework of the strategic objectives set by the Board of Directors and the Executive Committee.

  After setting the operational and performance objectives of the Region and global Business Units (see above), their progress is monitored at monthly operation and performance reviews, in which a representative of the Executive Committee, the Region and business unit managers and the functional departments involved all take part;
- the functional departments assist the Executive Committee with controlling and guiding operations and act in support of the Regions and Business Units according to principles and procedures applicable across the entire Group.

The functional departments mainly include the Finance Department, the General Secretary (which heads the Legal Department and the Internal Audit, Risk and Investments Department), the Research, Innovation and Digital Transformation Department, the Performance Department, the IT Department, the Engagement and Communications Department, and the Human Resources Department.

3.3.2.2 Monitoring and evaluation of internal control

The Group's internal control monitoring is organized according to the following principles:

- the role of the Audit and Financial Statements Committee (as provided for in the Board of Directors' Internal Regulations) is to assess the effectiveness of the Group's internal control systems and examine the procedures applied to assess and manage the Group's significant risks (pursuant to the Decree of December 8, 2008, which transposes the Eighth European Directive into French law);
- the Group's Executive Committee is responsible for implementing the internal control systems; that responsibility is rolled out to the business unit managers and the management teams of the operating subsidiaries. The Group's guidelines and rules of operation are distributed by the operational or functional departments concerned. All Group employees can also find them under the "SUEZ Book" section of the Group's intranet site. The Chief Executive Officers and Chief Financial Officers of the main operating subsidiaries confirm, *via* half-year and year-end representation letters, their responsibility for implementing an efficient internal control system within their organization;
- the internal control system is implemented in a manner consistent with the risks identified in the Group's activities through a risk-mapping process managed by the Group's Chief Risk Officer;
- the Internal Control Department, which is under the Finance Department, manages the Group's internal control program; its mission is to analyze and improve the internal control system in collaboration with the Group's main subsidiaries and functional departments. Its actions are supported by a network of internal Control Officers and Process Owners identified within the main subsidiaries of the Group, who are trained in the Group's internal control principles and methods.

  As part of the Group's internal control program, a questionnaire on the general control environment has been created and risk guidelines have been defined. These cover key operational processes: Sales Management, procurement management, Asset Management and contract management; support processes: the preparation of accounting and financial information, financial management, IT system management, legal management, tax management, external communications, as well as global processes: the management of commitments, corporate governance and external communications.

  For each process, in conjunction with the risk matrix prepared by the Director of Internal Control, risks and examples of controls considered necessary for maintaining an effective internal control system have been identified. The controls implemented to meet these risks are generally specific to the business and organization of each entity.

  The Group's internal control program is based on dedicated tools that:

  - disseminate risks to be covered and provide examples of controls,
  - describe, update and conduct annual assessments of controls *via* the Process Owners for each key process identified at the main subsidiaries;
- the mission of the Internal Audit, Risk and Investments Department, which reports to the Audit and Financial Statements Committee and to the Office of the General Secretary, is specifically to ensure that the Group has an efficient internal control system and manages its risks properly.

To assess the reliability of the internal control system, the Internal Audit, Risk and Investments Department performs audits intended to evaluate the design of controls aimed at covering risks, particularly by reviewing processes and testing key control activities at each of the main subsidiaries. Furthermore, at the end of each audit, the Department makes recommendations, monitors their implementation and reports regularly to the Executive Committee and the Audit and Financial Statements Committee;

- external audit: assessment and analysis of internal controls within the Group are performed in close coordination with the Group's Statutory Auditors. They are informed of the results of the internal audit tests, among other things.

3.3.2.3 Compliance with laws and regulations

Compliance with laws and regulations is the responsibility of the business unit managers, the management of the operating subsidiaries and the functional departments in their respective areas of competence. For example, certain cross-divisional compliance objectives are managed by the functional departments concerned:

- the General Secretary, acting as the Group's Ethics Officer, is responsible for ensuring compliance with the Ethics and Compliance Program, which aims to prevent or detect any behaviors contrary to the Group's rules of ethics (see section 3.2.4 above);
- the General Secretary oversees implementation of the procedures circulated within the Group to ensure compliance with its obligations on insider information and insiders;
- the Finance Department ensures the Group's compliance in accounting, financial and tax-related matters. It is responsible for producing the financial reports required by law;
- the Human Resources Department ensures compliance with the labor legislation and regulations in force and produces the labor reports required by law. It implements the Group's labor policies, particularly those relating to Health and Safety;
- the Performance Department oversees the Group's compliance in environmental matters. It produces the necessary environmental reports within the framework of non-financial communications. An annual representation letter regarding environmental compliance, signed by the subsidiaries' Chief Executive Officers, confirms their commitment in this regard.

3.3.2.4 Internal control procedures relating to the preparation, treatment and circulation of accounting and financial information

1) Accounting standards and procedures

The main procedures put in place for the preparation of the statutory and Consolidated Financial Statements are based on:

- the Group's accounting policies manual, which is accessible *via* the intranet to all Group finance professionals. It is regularly updated based on changes to IFRS; and
- the Group closing instructions are circulated before every phase of the consolidation process by the Accounting and Consolidation Department. These instructions cover the closing assumptions (exchange rates, discount rates and tax rates, etc.), processes for specific topics (*e.g.* pensions, impairment tests and off-balance sheet items), the scope of consolidation, the timetable for submitting information, items relating to closing that require particular attention, changes in the chart of accounts and significant new standards introduced.

2) Preparation of accounting and financial information

Responsibilities for preparing accounting and financial information are assigned at every organizational level of the Group. These include the set-up and maintenance of efficient internal control systems. Within the Finance Department:

- the Accounting and Consolidation Department organizes the Group financial statement production process, which includes producing and controlling the statutory and Consolidated Financial Statements of SUEZ, producing forecasts and monthly consolidated financial reports as well as the medium-term plan. This work is carried out with input from the accounting and planning and control Departments of each consolidated subsidiary. Each party involved performs checks to enable the circulation, assimilation and correct application of Group accounting standards and procedures in their area of responsibility. These responsibilities are confirmed by the Chief Executive Officers and Chief Financial Officers of each subsidiary or each consolidation level *via* a biannual representation letter.

  The Accounting and Consolidation Department is responsible for relations with the AMF Accounting Department;
- the Planning and Control Department is responsible for analyzing the Consolidated Financial Statements, forecast reports, monthly consolidated financial reports, as well as the medium-term plan.

3) Management of accounting and financial information systems

The Group and its subsidiaries use a single, standardized consolidation software application, managed by the Group, to secure and standardize the preparation process for forecasts, monthly reports, financial statements and the medium-term plan.

Each of the Group's subsidiaries is responsible for and manages its own information system used to prepare accounting and financial information, including their statutory financial statements.

4) Setting objectives and steering

Within the Finance Department, the Planning and Control Department steers the process for preparing financial forecasts and writes the budget instruction letters sent to each business unit, relaying the macroeconomic assumptions to be applied and the financial and non-financial indicators to be measured the following year through the various forecast reviews.

The Planning and Control Department steers the monthly operation and performance reviews process. The purpose of these meetings is:

- to define the financial objectives and forecasts twice a year;
- each time, to analyze the operational and financial performance of each business unit, how their business is going and key events, as well as monitor their operational risk management;

using management reports based on the Group's consolidated monthly financial reports.

The consolidated Group budget is presented to the Board of Directors.

The Group's Chief Executive Officer sends each business unit a budget letter outlining its annual quantitative and qualitative objectives.

5) Financial communications

a) Preparation and approval of the interim and annual reports

Within the Finance Department, the Accounting and Consolidation Department is in charge of preparing the Universal Registration Document filed with the AMF as well as the interim Financial Report, and heads up a dedicated Steering Committee jointly with the Legal Department whose purpose is:

- to coordinate the process for submission and validation by all relevant functional departments of the information contained in the Universal Registration Document and in the interim Financial Report;
- to ensure that the regulations and AMF recommendations on financial communications are applied.

b) Preparation and approval of press releases

The Engagement and Communications Department and, within the Finance Department, the Financial Communication Department and the Legal Department are responsible for reporting all information that could have an impact on the SUEZ share price.

Since the Group was listed on the Stock Exchange, the Engagement and Communications Department and the Financial Communication Department have implemented procedures aimed at ensuring the reliability of the regulatory information communicated to the market.

c) Relationships with rating agencies

Within the Finance Department, the Treasury and Capital Markets Department maintains relationships with rating agencies in cooperation with the Financial Communication Department.

3.3.3 Changes in 2019 and outlook

The Group improves its internal control system every year. This continuous improvement process relies, in particular, on defining and operating an internal control plan that is specific to each of its main subsidiaries. The progress of these plans is presented yearly to the Audit and Financial Statements Committee.

While maintaining the current internal control program, the Group is also continuing its process to simplify this program to make it more accessible for operational processes and to be able to expand its implementation as a result.

In 2019, internal control actions mainly included:

- rolling out a platform of controls across all business units and functional departments to cover risks considered "essential" for the Group;
- implementing a new internal control application and training all Group business units and functional departments on how to use it. This application disseminates risk guidelines. Each business unit or functional department documents controls performed to cover these risks in the application and assesses if they were properly implemented at least once per year.

The main internal control development areas for 2020 are:

- adapting the Group internal control system to changes in the organization;
- continuing to improve how the Group manages access to IT applications and making segregation of duty reviews more systematic;
- rolling out the second part of the risk guidelines relating to "standard" risks for medium-to large-sized entities.

4 Group information

4.1 Legal name

As of April 28, 2016, the legal name of the Company is SUEZ. Before that time, the legal name of the Company was SUEZ ENVIRONNEMENT COMPANY.

4.2 Trade and Company Register and Legal Entity Identifier (LEI)

The Company is registered in the Trade and Company Register of Nanterre (France) under the number 433 466 570. SUEZ's Legal Entity Identifier or "LEI" is: 549300JQIZM6CL7POC81.

4.3 Company's date of incorporation and term

The Company was incorporated on November 9, 2000 for a term of 99 years. Except in the event of early dissolution or extension, the Company will cease to exist on November 9, 2099.

4.4 Registered address, legal form and applicable legislation

The Company's registered address is Tour CB21, 16, place de l'Iris, 92040 Paris–La Défense Cedex, France.

Telephone: + 33 (0)1 58 81 20 00.

The Company is a French *société anonyme* (public limited company) with a Board of Directors, and is governed by the provisions of Book II of the French Commercial Code applicable to commercial companies and all legal provisions applicable to commercial companies. It is governed by current legal and regulatory provisions and by its bylaws.

The Company's website is www.suez.com[1].

(1) Information shown on the Company's website is not part of this Universal Registration Document unless the information is incorporated by reference in this Universal Registration Document.

4.5 Group history

Since 2003, SUEZ Environnement has handled all the expertise in water management, wastewater treatment and waste management services within the SUEZ Group (which became GDF SUEZ and then ENGIE). This expertise was supported by companies such as Degrémont (which became SUEZ International), Safège, Lyonnaise des Eaux (which became SUEZ Eau France) and Sita (which became SUEZ RV France), which are renowned for their highly-developed know-how, in some cases serving their customers for more than a century.

1880, ESTABLISHMENT OF LYONNAISE DES EAUX ET DE L'ÉCLAIRAGE

The company operated in the public services of water, electricity and gas distribution in rapidly growing cities and suburbs such as Cannes, Bordeaux, Lille and Rouen. From the very beginning, Lyonnaise des Eaux was also developing its activities abroad.

1919, CREATION OF SITA

The Société Industrielle des Transports Automobiles (Sita) was one of the two service providers selected to collect household waste in Paris. At that time, Sita had two activities: transport of all kinds and public service delegation. It later diversified into passenger transport and corporate vehicle leasing.

1946, PARTIAL NATIONALIZATION OF LYONNAISE DES EAUX

In 1946, France nationalized the gas and electricity sectors. Lyonnaise des Eaux et de l'Éclairage was partially nationalized. The company therefore focused on water-related activities to meet the growing demand for services and network development in the suburbs of large cities. In line with this same growth strategy, Lyonnaise des Eaux became a majority shareholder in Degrémont, a water treatment company established in Paris in 1939.

1971, ACQUISITION OF SITA

In order to meet increasing environmental protection requirements, Sita set up a waste sorting and recycling line in the 1970s. In 1971, Lyonnaise des Eaux acquired a stake in Sita, which became the Group's "Waste division". Since 2000, Sita (now called SUEZ RV France) has been 100% owned by the Group.

1974, COMPAGNIE FINANCIÈRE DE SUEZ, MAJORITY SHAREHOLDER OF LYONNAISE DES EAUX

In 1974, Compagnie Financière de SUEZ became majority shareholder of Lyonnaise des Eaux. After being nationalized by the French government in 1982, Compagnie Financière de SUEZ was again privatized in 1987.

1997, MERGER OF COMPAGNIE FINANCIÈRE DE SUEZ AND LYONNAISE DES EAUX

In 1997, the merger between Lyonnaise des Eaux and Compagnie Financière de SUEZ resulted in SUEZ Lyonnaise des Eaux, the world's leading Group for local services.

2001, SPIN-OFF OF THE SUEZ GROUP WATER ACTIVITIES

In 2001, SUEZ Lyonnaise des Eaux became SUEZ and, through a contribution in kind, combined all of its water-related activities within Ondeo as part of a spin-off process. Water activities in France were consolidated under the name Lyonnaise des Eaux France.

2003, FORMATION OF SUEZ ENVIRONNEMENT

In 2003, the water and waste activities were combined within SUEZ Environnement following the merger of Sita with Ondeo Services, which changed its name to SUEZ Environnement. SUEZ Environnement then united almost all of the environmental activities of the SUEZ Group (which became GDF SUEZ and then ENGIE) in the water, waste and engineering sectors.

2008, LISTING OF SUEZ ENVIRONNEMENT COMPANY

As part of the merger between SUEZ and Gaz de France, which created a global leader in the gas and electricity sectors with a strong French-Belgian base, SUEZ completed the consolidation of all its environmental operations within a new company: SUEZ ENVIRONNEMENT COMPANY. SUEZ contributed all the shares of the former company SUEZ Environnement to this new company, and distributed 65% of the capital of SUEZ ENVIRONNEMENT COMPANY to the SUEZ company's shareholders prior to the merger. Since that distribution, the merged entity GDF SUEZ, later ENGIE, has had a stable equity stake in the Company (32.06% as of December 31, 2019).

2010, TAKEOVER OF AGBAR

On June 8, 2010, the Company completed the process of taking over Aguas de Barcelona (Agbar), announced in October 2009. As a result of this transaction, SUEZ owned 75.23% of Agbar, a company formed in 1882 which specializes in water cycle management in Spain and other countries (primarily Chile). On September 17, 2014, the Company acquired the indirect interest owned by Criteria Caixa in Agbar and at the conclusion of this transaction held 99.49% of Agbar, a stake that was increased to 100% in 2015. On this occasion, Criteria Caixa became the second largest shareholder of the Company, acquiring a 4.1% stake in its share capital, which was increased to 5.97% as of December 31, 2019.

2012-2013, END OF THE SHAREHOLDERS' AGREEMENT

On December 5, 2012, the Board of Directors of the Company recorded the decision by ENGIE and all signatories of the Shareholders' Agreement (as described in section 18.3.1 of the 2013 Reference Document), except the Company, not to renew the Shareholders' Agreement, which therefore ended on July 22, 2013.

This decision resulted in ENGIE losing control of the Company. As of July 22, 2013, the stake held by ENGIE in the Group (32.06% as of December 31, 2019) is accounted for by the equity method in the Consolidated Financial Statements of ENGIE.

ENGIE remains a long-term strategic partner and reference shareholder of the Company.

2015, A SINGLE BRAND, SUEZ, TO ACCELERATE THE GROUP'S DEVELOPMENT AND TO SUPPORT IT IN MEETING CHALLENGES TO GROWTH

In 2015, all the Group's trademarks were federated under a single brand, SUEZ, positioned in the sustainable management of resources.

This change has three goals: to simplify a multi-brand architecture to improve performance and commercial efficiency, to meet the new needs of customers, and to reinforce the convergence between the Group's businesses in order to address the challenges of a circular economy.

The Group is now organized around four main activities: management of the extended water cycle, recycling and reuse of waste, water treatment solutions and consulting services (Safège) for sustainable urban and regional development.

2017, ACQUISITION OF GE WATER AND CREATION OF THE WATER TECHNOLOGIES & SOLUTIONS (WTS) BUSINESS UNIT

On September 29, 2017, SUEZ finalized the acquisition of GE Water, announced in March 2017. At the same time, SUEZ created a "Water Technologies & Solutions" (WTS) business unit that includes former GE Water entities and SUEZ entities specialized in Industrial Water. This transaction was carried out in partnership with Caisse de Dépôt et Placement du Québec (CDPQ), which holds 30% of the newly created entity named SUEZ Water Technologies and Solutions.

This acquisition fulfills one of SUEZ's strategic objectives: to be a major player in industrial water services that covers the entire value chain. This transaction, in particular, enables the Group to increase its international presence and innovation capacities.

2019, SUEZ LAUNCHES THE "SHAPING SUEZ 2030" STRATEGIC PLAN

On October 2, 2019, SUEZ announced the launch of "Shaping SUEZ 2030", a comprehensive strategic plan to position the Group to embrace the opportunities and challenges that lie ahead over the coming decade. The goal of this plan is to create even more value for stakeholders over the next four years and deliver tangible results by 2021. SUEZ's ambition is to become the global leader in environmental services. This strategic plan is described in section 5.4.1 of this Universal Registration Document.

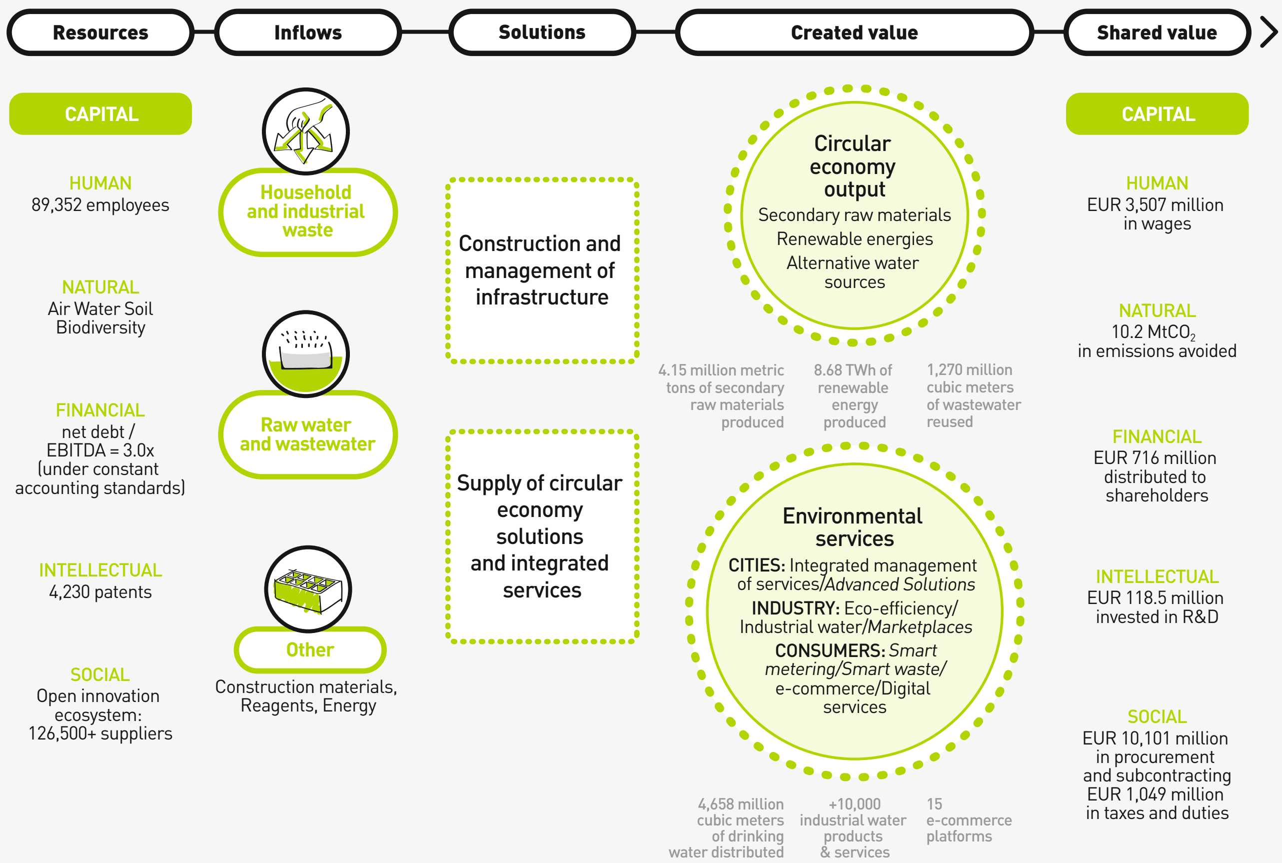
5 Overview of activities

With total revenues of EUR 18 billion and 89,352 employees as of December 31, 2019, the Group is one of the two main players in the global environment market.

SUEZ is supporting the environmental transition of towns and cities and industrial operators which have fully taken on board the scarcity of resources and the need to combat climate change, while simultaneously adapting to the consequences this change has already brought about. The Group, which focuses on a circular-economy model, is present throughout the water management and waste-recovery value chain: from the construction and the operation of water networks and infrastructure, to collection, sorting and recycling, and even the production of renewable energy, new materials and the provision of digital services.

The Group is thus able to offer a complete range of services in terms of types of services and contracts, adapted to all categories of customer, including public authorities and private industrial players.

The SUEZ value creation chain



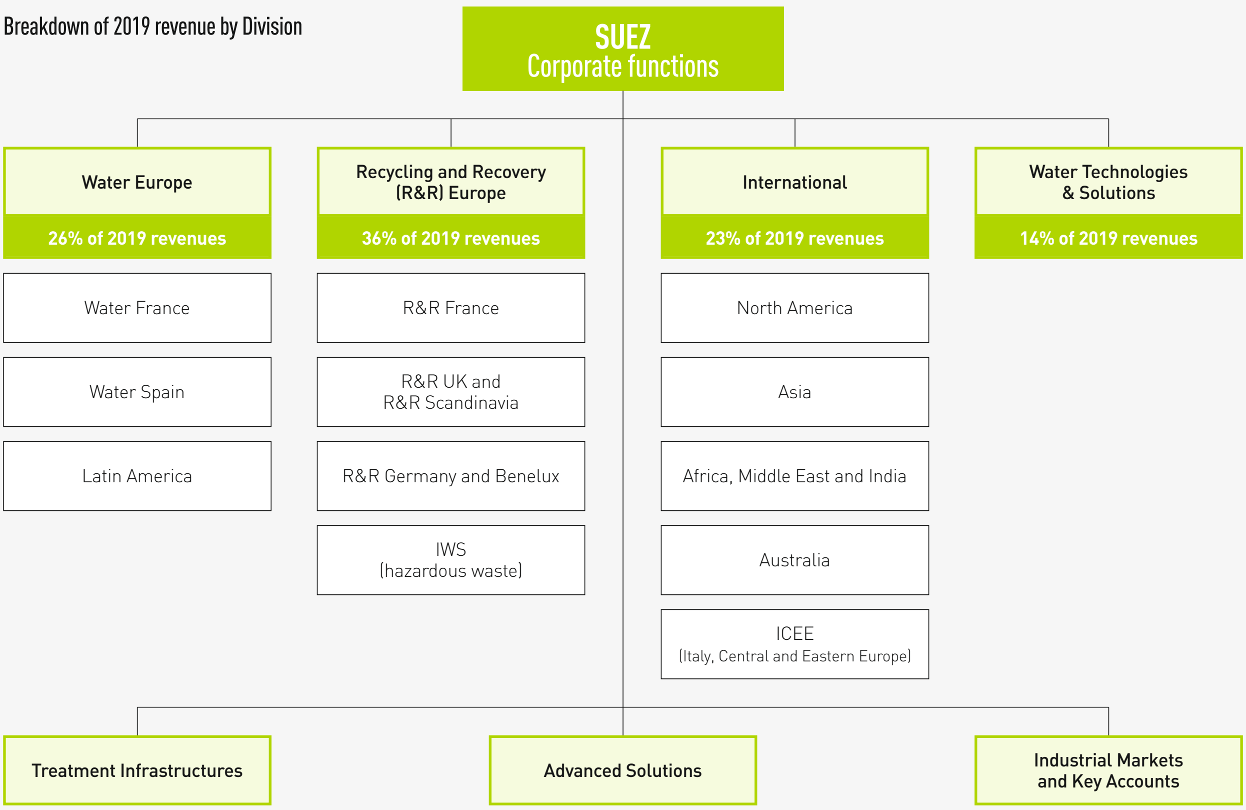
5.1 Operational organization chart

The organization presented in this report is that applicable to 2019. As part of the roll-out of the "Shaping SUEZ 2030" strategic plan, which is detailed in chapter 5.4 of this Universal Registration Document, Bertrand Camus, the CEO of SUEZ, announced a new organizational structure as of January 1, 2020. Agile, decentralized and closer to customers, the organization has been designed to support the improvement of performance and selective growth and to accelerate digitalization and innovation, which are central to the strategic plan. The operational BUs will be divided into six major regions (France, Northern Europe, Southern Europe and Latin America, North America, Middle East Africa and Central Asia, Asia Pacific) and two global Business Units (Water Technologies & Solutions, Smart & Environmental Solutions).

As of December 31, 2019, the Group's structure was built around four operational divisions – Water Europe, Recycling and Recovery Europe, International, and Water Technologies & Solutions – comprising fourteen Business Units and three cross-divisional businesses (Treatment Infrastructures, Advanced Solutions and Industrial Markets and Key Accounts). Another segment, known as "Other", mainly covered corporate functions, as well as the activities of SUEZ Consulting.

The chart below shows the structure of the Company's operational divisions and cross-divisional businesses in 2019.

Breakdown of 2019 revenue by Division



Revenue of "Other" segment represents approximately 1% of 2019 revenues.

5.2 Main activities

One of the Group's principal strengths lies in the diversity and balance of its businesses and geographical exposure.

The Group's consolidated revenues show a balance between its water and waste activities. SUEZ has a European base: 61% of its 2019 revenues were earned in Europe. SUEZ is mainly positioned in developed markets with stable political and legal systems: 80% of its 2019 revenues were generated in Europe, North America and Australia.

The balance in the Group's business model is also due to the variety of its exposure: service contracts, equipment and chemical supply, short-, medium- or long-term O&M contracts, exposure to local authorities or industrial customers as well as to regulated/non-regulated markets, and finally investment, construction and operation of proprietary assets.

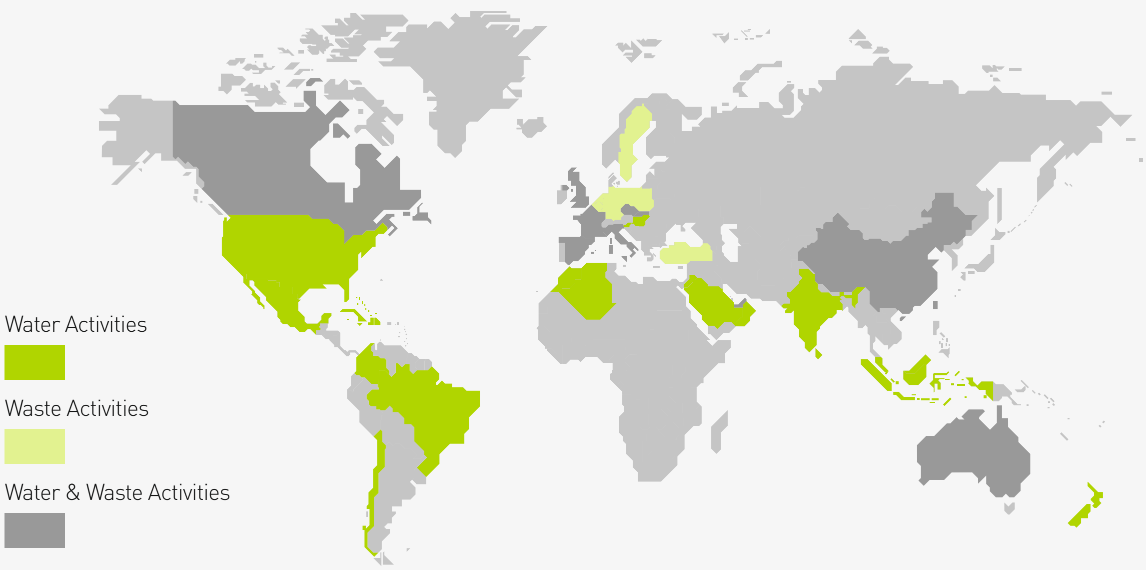
In 2019, 56% of the Group's consolidated revenues were generated in the Water segment, and 44% in the Waste segment. The Water and Waste businesses offer certain complementary features, which the Group has turned into one of its strengths.

Thus, the Group is able to generate synergies between the two activities, particularly by sharing certain technologies (for example, in sludge and compost treatment), combining research and development in various targeted programs (such as biomass management for material and energy recovery purposes) and realizing operating synergies by pooling certain corporate functions.

A significant proportion of the Group's business is conducted through delegated management contracts (delegation of public service in France, or the equivalent outside France), entered into for long periods of time. These contracts generally afford the Group the flexibility needed to maintain its economic balance, notably by continually improving the quality and sophistication of the services provided, thus meeting the needs of both parties by offering innovative and profitable services or technologies.

This map shows the locations of the Group's main subsidiaries around the world as of December 31, 2019:

Location of the Group's main subsidiaries around the world as of December 31, 2019



5.2.1 Water

In the water sector, around the world:

- in 2019, the Group operated 1,410 drinking water production sites, and produced around 7.1 billion cubic meters of drinking water;
- in 2019, the Group operated 2,642 wastewater treatment sites, and biologically treated over 4.7 billion cubic meters of wastewater.

A) COMPLETE MANAGEMENT OF THE WATER CYCLE

Through its subsidiaries, the Group covers the entire water cycle value chain for all its customers (public authorities and private sector customers), including:

- studies and master plans, modeling of networked and natural water flows (groundwater, rivers and coastlines), and engineering of water management infrastructure projects;
- engineering, design and construction of water treatment facilities through the Treatment Infrastructures business line;
- drinking water distribution and wastewater treatment services, which include:
  - drinking water production and distribution services: catchment, treatment and distribution of drinking water,
  - wastewater treatment services (municipal or otherwise): collection, clean-up and disposal of wastewater and rainwater,

- customer management: relations with end-users and consumers, meter reading and the collection of payments made by end-consumers, and
- for private sector customers: defining, building and operating tailored and scalable water management solutions and selling high-end water treatment equipment. The Group's private sector customer offer includes the management of water resources, process water, wastewater and effluents, as well as sludge.

The Group offers a broad range of services, from drinking water production to wastewater treatment. It offers services in the following five areas:

- Water pumping and treatment

  Pumping is the operation that extracts water from rivers, groundwater and reservoirs to be piped to treatment plants. Treatment depends on the quality of the raw water and may include many steps: pretreatment (screening), clarification, filtration (elimination of finer particles), refining (elimination of micro-pollutants) and disinfection (elimination of viruses and bacteria).

- Storage and distribution

  Reservoirs provide a safety net in the event of production problems, consumption peaks, or pollution of resources. The underground distribution network is monitored in order to ensure stability of water quality and to prevent leaks.

- Customer service

  Specialized units are responsible for handling relations with consumers, taking into account local realities: contract signings, meter reading, billing and account settlement or administration.

- Wastewater collection and treatment

  Wastewater treatment networks are an essential factor in combating domestic pollution. They must pipe all wastewater to the wastewater treatment plant. Wastewater treatment requires a set of complex physical and biological procedures. Wastewater treatment networks are also used to collect and drain rainwater *via* techniques that make it possible to separate it from wastewater, if needed.

- Sludge

  Treating 1 cubic meter of wastewater produces 350 to 450 grams of raw sludge. Sludge drying and treatment processes reduce its volume. In France, most sludge is recycled in agriculture through spreading, conversion to compost or recovery as energy.

The Group is offering its clients new dedicated environmental services (audits and assistance in reducing the environmental footprint of water services in a given territory, quantitative management of resources to counter the impact of climate change and services to improve the water quality of rivers, lakes and swimming areas). The Group is also providing its expertise for the collection, data processing and design of innovative digital applications for the environmental performance of cities and users with data collection solutions (communicating meters, sensors and probes) to supply digital models and real-time applications to support the transition to a rational use of resources and resilience in times of crisis. The Group relies on proprietary technologies and innovation to develop and roll out advanced solutions on a worldwide scale. It also aims to create new high-potential activities, such as the management of air quality and smart agriculture.

B) CONTRACTUAL RELATIONS WITH CUSTOMERS IN THE WATER SECTOR

The Group's customers are local public authorities and industry (mainly through its SUEZ Water Technologies & Solutions subsidiary or SUEZ Consulting for studies). However, the Group also serves local industrial and commercial customers under public service contracts.

Contractual relations with public authorities

In general, local authorities are responsible for organizing both drinking water distribution and wastewater treatment services. They may choose to manage these directly (as a local publicly owned company) or rely on an outside operator, which may be public, private or semi-public.

Contracts entered into by the Group with public authorities are governed by the rules for public contracts and/or specific competitive procedures.

The Group distinguishes between:

- delegation of public service contracts in France, or their equivalent outside France, including leases and concession contracts, and all intermediate contractual forms. Under these contracts, the Group is responsible for all service management (water production and distribution and/or wastewater treatment): it is involved in managing relations with end-users, meter reading, preparing invoices and collecting payments made by end-users. The Group engages in this activity at its own risks, and its compensation derives from billing users; a portion of the sums billed is paid back to the local authorities to finance new investments. Leases differ from concession contracts according to the size of investment for which the private operator is responsible. Most of the Group's contracts in France are leases that are generally long-term, ranging from 10 to 20 years; and
- contracts for services and works, in which case operations and works are billed to the relevant local authority. These are medium- or long-term contracts, generally 5 to 20 years.

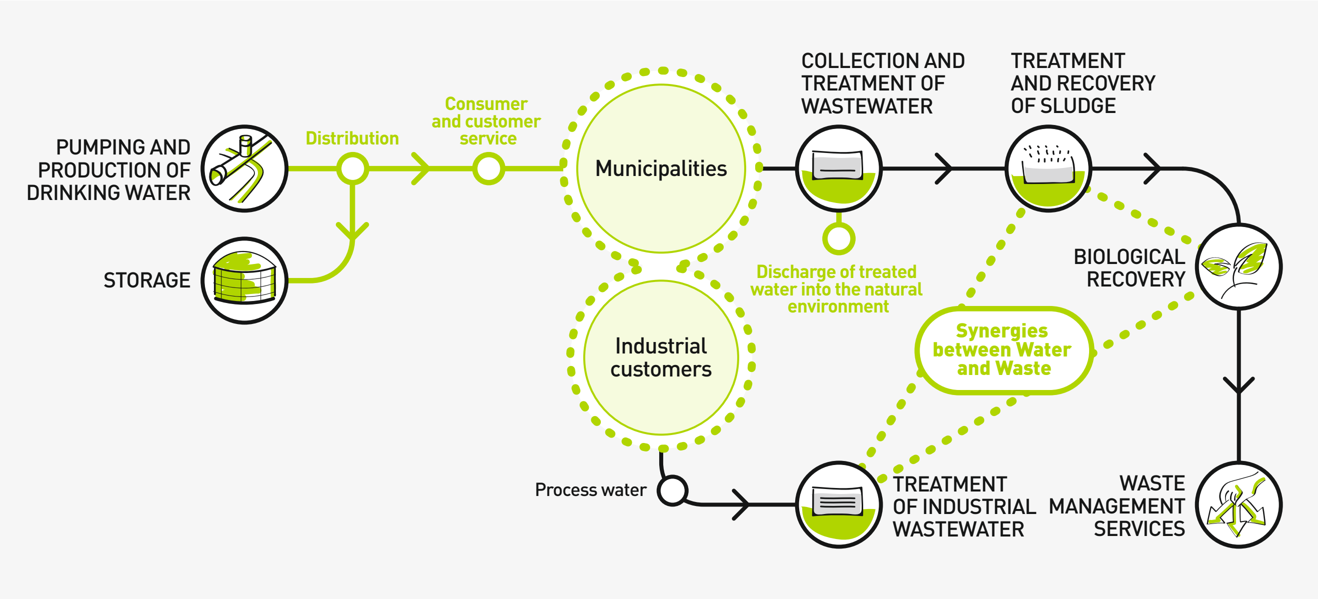
In general, public authorities own the assets involved in drinking water distribution and wastewater treatment services. However, in certain countries (notably the United States), the Group owns the assets it operates; in this case, there are no contractual relations with public authorities; relations between the private operator, the various customers and other stakeholders are then governed by a regional or national regulator under an operating license issued by the regulator. In addition, in France, for historical reasons, the Group owns certain assets.

Contractual relations with industrial customers

The Group is also active in the entire water cycle with industrial customers operating under design and build contracts, services contracts, such as operating and maintenance agreements, and the supply of mobile processing facilities and/or equipment sale agreements. Contracts are then generally agreed upon for shorter terms than is typical for local authority contracts, most often from one to five years for a service contract.

As a multi-disciplinary engineering firm, SUEZ Consulting also assists private customers in defining their environmental strategy, integrating their project into the site, water management in the industrial cycle and the preparation of regulatory filings.

A value chain that uses complex industrial processes



5.2.2 Recycling and recovery

In the waste sector, around the world:

- in 2019, the Group treated nearly 46 million metric tons of waste. Through its waste collection activities, it served over 35.2 million people and 321,727 customers working in services and industry;
- the Group operated 103 composting platforms, 57 incineration sites (with energy recovery capacity), 807 sorting, material recovery and transfer stations and 113 landfills and used a fleet of 11,354 heavy vehicles.

A) COMPLETE MANAGEMENT OF THE WASTE CYCLE

The Group manages the entire waste cycle by being involved at each stage in waste management, and in almost every type of waste:

- collection of non-hazardous waste from municipalities and companies, sorting, pretreatment, material recycling and recovery, biological recovery (which mainly involves agricultural recovery and the remediation of poor soil), energy recovery (incineration, co-incineration and methanization) and landfilling, including the recovery of biogas;
- hazardous waste management (excluding waste that may be contaminated by radioactive residues from nuclear activities);
- treatment of wastewater and urban cleaning: maintenance of municipal and industrial networks and cleaning of industrial production tools; street washing/sweeping, maintenance of street furniture; beach cleaning and snow clearing;
- soil remediation: treatment of polluted sites, soil, subsoil, and groundwater, dismantling and conversion of buildings;
- dismantling and disassembly of end-of-life vehicles, aircrafts and boats.

The Group offers services in the following areas:

Non-hazardous waste (collection, sorting, recovery and elimination)

In the non-hazardous waste segment, the Group collects, sorts, recycles, recovers and eliminates waste of municipal or industrial origin.

Collection

Each day, the Group collects waste of all kinds from private individuals, companies and public entities, including household waste, organic waste, non-hazardous industrial waste, medical waste, and liquid and solid waste.

The Group has a fleet of trucks suitable for all types of waste collection: mixed waste collection, selective collection, bulky items, medical waste and industrial waste, in urban and rural environments. Waste from selective collection (plastic, glass, metal, paper, etc.) is sent to sorting sites to be prepared for recycling; residual waste is sent either to transfer/sorting/pretreatment platforms or directly to incineration plants or landfills. Certain waste products may be highly polluting (batteries, aerosol cans, etc.). They are then sent to specialized sites for cleaning and conditioning before treatment or recovery.

Materials recovery

Household and industrial waste from selective collection is sent to one of the 511 sorting and material recovery sites operated by the Group. It is then sorted by type (plastic, glass, paper, cardboard or metal), conditioned and consolidated by recovery process on appropriate platforms. Recoverable materials are then sent to appropriate processing areas and sorted, and non-recyclable waste is recovered for energy whenever possible by incineration. Failing this, it is landfilled.

The economics of recycling are intended to afford industrial customers a steady supply of quality recycled materials and provide waste producers with ongoing management of their waste in compliance with applicable regulations. Recycling activities (for example, involving metals and plastics) are also organized around specific collections.

In 2019, the Group managed over 19 million metric tons of waste set for recycling. Of this total, nearly 11.3 million metric tons were processed for material recovery. Furthermore, the Group is bolstering its dismantling and recovery lines for Waste electrical and electronic equipment (WEEE), end-of-life aircraft and vehicles (ELV).

At its customers' request, the Group is also pursuing the implementation of industrial processing solutions to recover residual waste, such as mechanical and biological sorting (MBS) of waste.

Composting and biological recovery

Composting is a natural process that involves converting organic waste into soil conditioner. Four types of waste are involved: (i) green waste from households and municipal customers, as well as by-products of the wood industry (bark, sawdust, etc.); (ii) the organic portion of household waste, restaurant and supermarket waste; (iii) sludge from wastewater treatment plants; and (iv) sludge and by-products from paper and food producers.

Numerous analyses are performed on organic waste before, during and after its conversion to compost. Air from the composting process is collected and treated to reduce odor pollution.

Sludge management is at the core of the Group's know-how, and the Group assists municipal customers in their sludge recovery and waste composting projects.

Energy recovery

Waste may also be recovered through incineration. Heat treatment of waste has several advantages: it reduces waste mass and volume, it is quick and hygienic and it produces energy (largely renewable) that can be recovered in the form of electricity and/or heat.

Six types of waste may be recovered for energy production: (i) household waste, (ii) industrial waste similar to household waste, (iii) waste from sorting sites, (iv) medical waste, (v) sludge from wastewater treatment plants and (vi) hazardous waste.

In the Group-operated incineration plants, waste is burnt at high temperatures in accordance with regulatory requirements. Heat released by the combustion is recovered in steam boilers. This steam is used to generate electricity and also supplies heat networks.

In 2019, the Group's energy recovery units treated approximately 8.2 million metric tons of waste, and produced over 3,626 GWh of electricity, resulting in the sale of more than 3,832 thermal GWh. The gases produced by waste combustion are purified using dedicated treatment systems before being released into the atmosphere. Solid waste essentially consists of bottom ash, which is reused for roadbeds after undergoing suitable treatment, or disposed of at landfills, as well as purification residue from smoke, which is landfilled after stabilization.

This activity is subject to numerous regulatory and technical constraints designed to reduce impacts (smoke emissions, production of bottom ash and fly ash) and to recover energy produced by waste combustion in the form of heat and/or electricity.

Organic waste may also be recovered for energy recovery through methanization. This process of decomposition of natural organic matter – by microorganisms and in the absence of oxygen – has long been known. Its use on an industrial scale is more recent. Methanization produces a biogas that may be recovered for electrical and/or thermal energy, plus a residue that may be recovered for use as an organic soil conditioner after composting. Biogas can also be injected into the gas distribution network.

Another method used for recovering energy is the production of Solid Recovered Fuel (SRF) from non-hazardous industrial waste and, to a lesser extent, household waste. Mainly used by cement manufacturers, this fuel continues to represent a real opportunity for developing solutions that complement the recycling and disposal sectors. The waste that goes into these SRFs is not easily recyclable under existing technical and economic conditions, so SRFs represent an excellent alternative fuel for cement and lime kilns as well as the heat- and steam-generating units of industries that consume high levels of energy (chemical producers, paper mills, etc.) and are equipped with adequate smoke treatment systems.

Elimination of waste in landfills

Landfilling remains the predominant treatment method in many countries. Upstream, the search for a site must conform to legally mandated specifications and conditions, specifically concerning soil quality, the protection of groundwater and distance from housing. During the operating stage, discharges must be controlled, effluents (biogas and leachates) captured, recovered or treated, and environmental parameters measured regularly. Once closed, sites remain subject to monitoring generally for 30 years (60 years in the United Kingdom).

The Group operates 113 landfills around the world, mainly in Europe. In the course of these activities, the Group develops and operates innovative industrial solutions for the recovery of renewable biogas energy from landfills.

Hazardous waste

Waste representing a danger to humans or the environment requires special precautions when being treated. Once collected, it is analyzed, sorted by type and then gathered. It is then sent to the most appropriate site.

There are several treatment options for such waste, including:

- recovery as a fuel substitute, particularly for cement kilns, after being subjected to any necessary physical pretreatment;
- incineration at high temperatures with energy recovery (as in the case of halogenated, toxic and reactive wastes);
- treatment using physicochemical and biological methods (as in the case of aqueous waste: acids, bases, chromate baths, some contaminated soils, etc.);
- treatment, clean-up or solidification before being landfilled at suitable sites. Mineral sludge and ashes, for example, is mixed with reagents to form a concrete that stabilizes pollutants within a mineral matrix before landfilling;
- regeneration for the purposes of materials recycling, *i.e.*, purified for reuse (in particular, this is the case for oils and certain solvents).

SUEZ IWS is an international player in the hazardous waste market. The Group has treatment facilities in France, Europe and China.

The Group may thus offer its customers solutions suitable for all types of hazardous waste (except waste potentially contaminated by radioactive residues from nuclear sites), such as packaging ranging from 100 grams (such as special household or laboratory waste) up to hundreds of metric tons. In 2019, more than 4.7 million metric tons of hazardous waste were treated by the Group: pretreatment on *ad hoc* platforms, stabilization and storage at class I landfills, incineration of waste with high chlorine or sulfur content and co-incineration at cement plants.

Wastewater treatment, maintenance and urban cleaning

The Group provides local authorities, residential and industrial customers with wastewater treatment and industrial cleaning services (particularly during plant shutdowns), collection of hazardous industrial waste, as well as more specific services such as the cleaning of water towers, oil-related work, or monitoring of wastewater treatment networks in nuclear plants.

Urban cleaning is a concern for local authorities and a health requirement. In this regard, the Group offers the following services: mechanized and manual street sweeping, maintenance of street furniture, poster and graffiti removal, snow clearing, beach cleaning, emptying and maintenance of refuse bins and public awareness measures. Depending on the country, additional services may be offered, such as the maintenance of public parks and gardens.

Pollution clean-up and conversion of polluted industrial sites

Soil pollution may be of two kinds: organic and mineral. There are three types of treatment:

- *in situ* treatment, for subterranean clean-up operations of water tables or soils without excavation;
- on-site treatment, whereby the soil is extracted but treated on site; and
- off-site treatment, when the soil must not only be extracted, but also sent to special sites where it undergoes biological, thermal or physicochemical treatment and/or landfilling.

Through its specialized subsidiaries, the Group has been developing innovative solutions for the clean-up and conversion of industrial sites.

By way of illustration, following on from its clean-up and remediation of the former Metaleurop Nord foundry site in France, the Group is now conducting clean-up and remediation operations of "The Avenue", an industrial complex in Chesterfield, in the United Kingdom, through its entity SUEZ IWS (formerly Sita Spécialités). This project, carried out in collaboration with Volker Stevin UK and DEME Environmental Contractors (DEC NV), is the largest public project of this type in the United Kingdom, and one of the largest sites for the clean-up of derelict industrial land in Europe.

Since the end of 2016, SUEZ has also been responsible for the clearing and recovery of excavated construction material from the Fort d'Issy-Vanves-Clamart railway station. Some 180,000 metric tons of soil will be analyzed and processed by SUEZ during the various phases of the project, between 2016 and 2021. The Group will accordingly achieve its objective of recovering 70% of the site's excavated material set by the Greater Paris company (Société du Grand Paris).

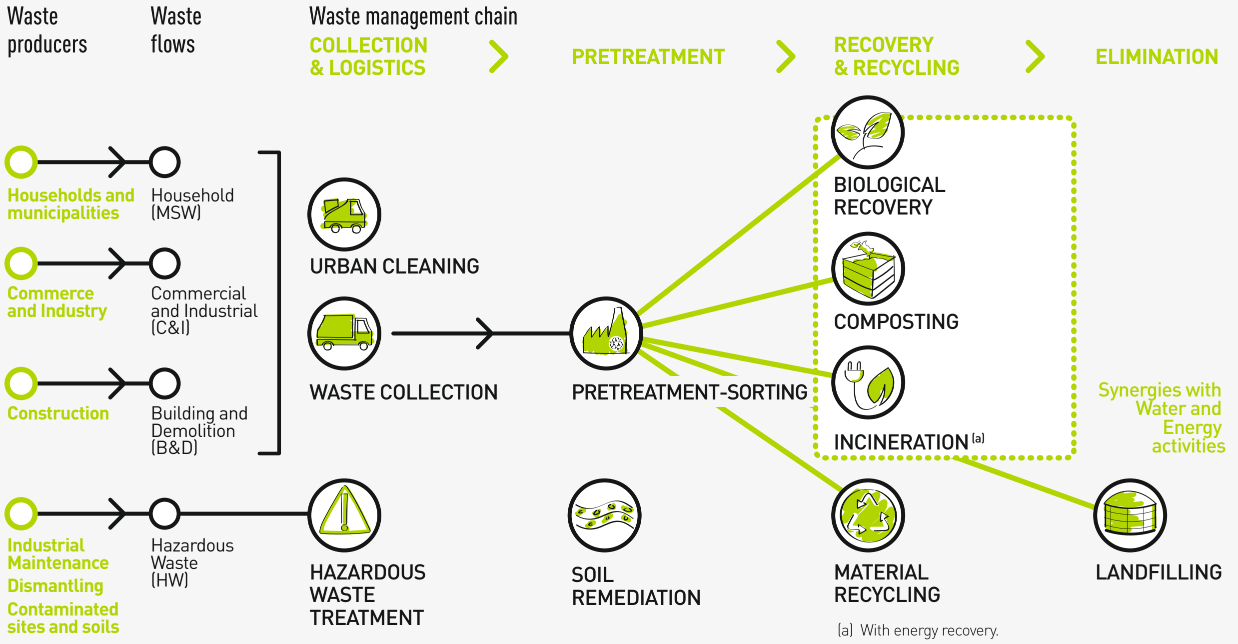
B) CONTRACTUAL RELATIONS WITH CUSTOMERS IN THE WASTE BUSINESSES

The Group works for two types of customers:

- public authorities (municipal or other authorities): contracts entered into with public authorities are generally medium- or long-term (generally with a term of three to seven years for collection, and up to 20 or even 30 years for treatment in certain cases), and involve locally regulated activities in which public services are major players; and
- industrial operators: contracts with industrial customers are generally short- or medium-term (often one year, renewable, for collection) and involve activities for which industrial customers increasingly outsource all their waste services management to subcontractors.

The Group offers energy produced during waste treatment and materials from this treatment and recycling (secondary raw materials) both to public authorities and industrial customers.

A complex value chain integrating several segments

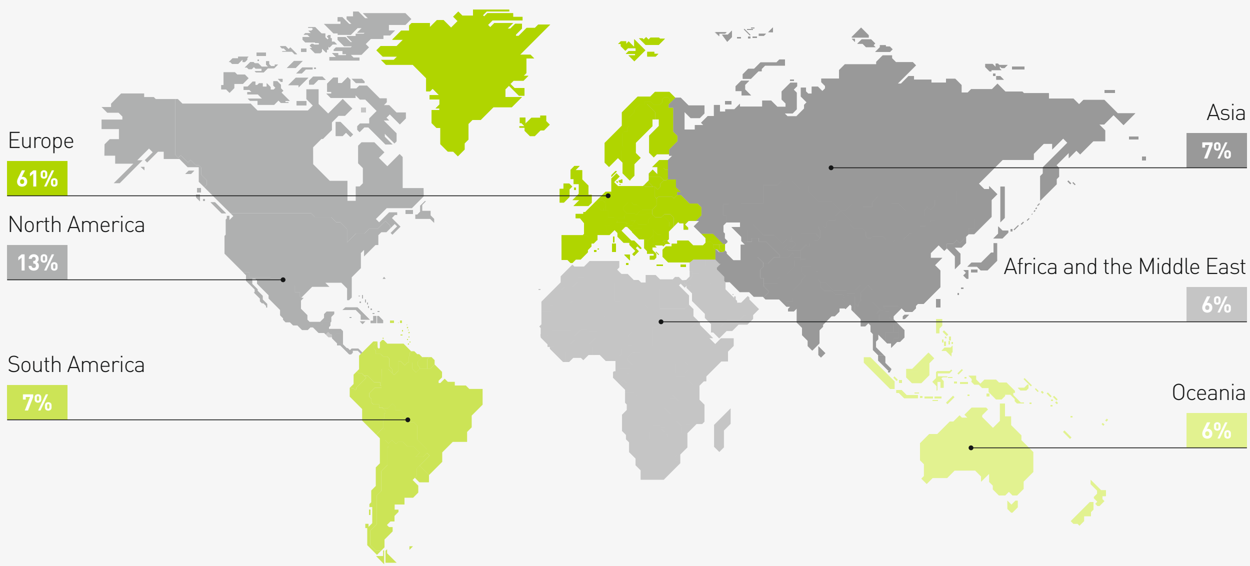


(a) With energy recovery.

5.3 Main markets

Europe is the Group's historical development area. Thanks to this foothold in Europe, particularly in France, the Group is able to leverage its know-how and skills and adapt them to other continents.

Breakdown of the Group's revenues by geographical region as of December 31, 2019 [(1)]



The Group benefits from an extensive network of subsidiaries and branches. As of the end of 2019, the Group was active as an operator in more than 70 countries.

The Group is pursuing a selective international growth strategy (outside Europe) based on identifying the fastest-growing markets with controlled risk profiles. The Group maintains a strong partnership culture, particularly in countries offering high growth potential in environmental activities and where teaming up with local partners deepens its understanding of local challenges, while allowing risks and invested capital to be shared.

In 2019, the Group generated revenues of EUR 18 billion. Revenues per business activity break down as follows:

(1) This map shows the geographical distribution of the Group's revenues irrespective of the accounting segmentation adopted in the Group's Consolidated Financial Statements in chapter 18.1 of this Universal Reference Document.

- Water Europe, representing 26% of the Group's consolidated revenues in 2019: EUR 4.6 billion;
- Recycling and Recovery Europe, representing 36% of the Group's consolidated revenues in 2019: EUR 6.5 billion;
- International (Treatment Infrastructures and activities outside Europe), representing 23% of the Group's consolidated revenues in 2019: EUR 4.2 billion;
- the WTS business unit, representing 14% of the Group's consolidated revenues in 2019: almost EUR 2.6 billion;
- other activities (parent and holding companies and SUEZ Consulting) representing almost 1% of the Group's consolidated revenues.

5.3.1 Information on Water Europe activities

Companies operating in the Group's Water Europe segment contributed EUR 4.6 billion to the Group's 2019 consolidated revenues, primarily through Water France, which generated 46% of consolidated revenues for the Water Europe segment, and Water Spain.

5.3.1.1 Water France

In 2019, Water France generated consolidated revenues of EUR 2.1 billion and employed 10,744 people.

1) Specific features of the sector

In France, 4 billion cubic meters of drinking water are invoiced annually to consumers connected to public water systems. Between 2006 and 2016, the volumes of water invoiced decreased by 11%, a drop of almost 500 million cubic meters. Regarding wastewater, 3.1 billion cubic meters were used as the basis for invoicing wastewater services in 2017. Water companies distribute nearly two-thirds of the volumes of drinking water in France (64% in 2017) and collect over half of the wastewater (53% in 2017). The distribution between private and public operators has been generally stable since 2006. (Source: *BIPE/FP2e study, 2019).*

2) Description of activities

The Group operates in France with public authorities and partly state-owned companies, through its subsidiary SUEZ Eau France and its subsidiaries. SUEZ Eau France has been involved in the water-related service sector in France since its creation in 1880, and today operates throughout the entire water cycle, from drinking water production to wastewater treatment. More specifically, it provides water pumping and treatment, storage and distribution, customer service, wastewater collection and treatment and sludge treatment services. Water France structures its commercial activities along 3 lines: construction (drinking water and wastewater plants), services (operation of water and wastewater services, treatment plants) and advanced solutions including digital services and diversification.

In 2019, Water France operated over 702 drinking water production sites and delivered over 935 million cubic meters of drinking water to the network.

In 2019, Water France operated 1,642 treatment plants, which treated nearly 820 million cubic meters of wastewater.

5.3.1.2 Water Spain

In 2019, the Water Spain business unit's contribution to the Group's consolidated revenues totaled EUR 1.5 billion. Water Spain employs 8,607 people (including the employees of Advanced Solutions and SUEZ Treatment Solutions).

1) Specific features of the sector

The Group estimates that private operators currently represent approximately 54% of the drinking water production and distribution sector, and 85% of the wastewater treatment sector. Drought is becoming increasingly commonplace and is putting added pressure on water supplies. Equally, violent rainstorms in the south and the southeast of the country occur frequently, putting ever greater pressure on the water and wastewater infrastructure. Significant investments are still required to meet the objectives set by the European Urban Wastewater Treatment Directive.

2) Description of activities

Water Spain operates throughout the entire water cycle: catchment, transportation, treatment and distribution of drinking water; collection, treatment and reuse of wastewater; recovery of sludge; and customer services. The Company's customers primarily consist of local public authorities.

In 2011, Water Spain launched Aqualogy, a new brand that consolidates the Group's know-how to offer value-added solutions tailored to municipal, industrial and services markets. At present, Aqualogy's business activities are grouped under the SUEZ Advanced Solutions Spain brand. During 2018, Water Spain continued the development of Advanced Solutions in the country, with environmentally responsible activities adapting to customers' needs and with a commitment to value creation. Advanced Solutions Spain focuses on the development of solutions in the areas of water, energy, municipal waste and industry.

During 2018, the Agriculture business line was launched in Spain through the constitution of SUEZ Agriculture and the creation of the SUEZ-Agriculture Sur joint venture, which aims to provide support services for planting, irrigation, crop protection, along with pruning and harvesting in the southern area of Spain and Portugal.

Water Spain operates 220 drinking water production sites and 609 wastewater treatment plants.

5.3.1.3 Latin America

Today, SUEZ LatAm has 5,020 employees. SUEZ generates more than 5% of its revenue (*i.e.* around EUR 1 billion) in this region, which extends from Tijuana to Ushuaia, encompassing the cities of Panama and Santiago de Chile.

1) Specific features of the sector

Latin America is replete with many natural resources, is home to a significant share of the world's biodiversity, and possesses almost 30% of the planet's freshwater resources. However, only 20% of the municipal and industrial wastewater generated is treated, compared with 71% in Europe in 2017, according to UN Water, despite an urbanization rate of 75% and the growth of high-consumption industrial activities. Faced with this situation, SUEZ is committed to the conservation of resources and preempts the challenges that lie ahead for the entire region.

2) Description of activities

SUEZ has been present in Latin America for almost 60 years. In 1957, the Group built water treatment plants in the cities of Lima, Peru and Brasilia, Brazil. In 2019, SUEZ extended its presence in Brazil through the acquisition of a drilling and well maintenance company, enabling the Group to strengthen its portfolio of smart solutions for the management of aquifer resources. Also, in 2019, in Ecuador the Group secured its first contract for the treatment of hazardous waste from the oil industry.

Since May 2019, SUEZ's activity in Latin America has been organized geographically in two business areas:

- LatAm North: SUEZ is mainly present in Mexico, Panama, Colombia and Ecuador and carries out water services management (Aguas de Saltillo joint venture, a service contract with Mexico City through ASIM, Acuacar joint venture in Cartagena de Las Indias, Aquaoccidente in Palmira, Colombia) and wastewater activities (Panama), offering smart solutions for improving performance throughout the water cycle, and creates and operates water treatment infrastructure (Mexico, Panama).
- LatAm South: In Chile and Peru, SUEZ provides services in the area of water management and treatment solutions to a range of municipal and industrial customers (particularly the mining industry). The Group is supporting the circular economy by modernizing the infrastructure of the Mapocho-Trebal and La Farfana wastewater treatment plants, within the scope of the Biofactorias program of Aguas Andinas which will enable these two plants to become fully energy self-sufficient, to produce gas that can be re-injected into the urban gas network and produce compost for local farmers. In Brazil, the Group operates in the municipal sector through performance-based contracts with public water management operators and; in the industrial sector, the Water Technologies & Solutions business unit supplies state-of-the-art equipment and services primarily to the oil and gas industries, as well as to the paper, metallurgy and mining sectors.

SUEZ is a shareholder of Aguas Andinas.

It should be noted that the development of activities with industrial customers is mainly being led by Water Technologies & Solutions.

5.3.2 Presentation of the Recycling and Recovery Europe activities

Europe is the heart of the Group's waste sector activities. Companies operating in the Group's Recycling and Recovery Europe segment contributed EUR 6.5 billion to the Group's consolidated revenues in 2019. The Group's Recycling & Recovery Europe business is operated mostly by SUEZ RV France and its specialized subsidiaries, SUEZ R&R Belgium, SUEZ Deutschland, SUEZ Recycling & Recovery Netherlands, SUEZ Recycling and Recovery UK and SUEZ Recycling AB in Sweden.

SUEZ also owns SUEZ Organique, a joint subsidiary of SUEZ RV France and SUEZ Water France, specializing in composting and sludge treatment in France.

Companies in the Recycling and Recovery Europe segment generated 49% of their revenues in France, 14% in the United Kingdom and 37% in the rest of Europe (EU and non-EU).

This division has served more than 24 million people, and over 225,000 industrial and commercial (I&C) customers. The Group collected nearly 18.8 million metric tons and processed 31.5 million metric tons of household, industrial and medical waste in Europe.

5.3.2.1 R&R France

In 2019, R&R France's contribution to the Group's consolidated revenue amounted to EUR 3.1 billion. At December 31, 2019, R&R France employed 15,586 people.

1) Specific features of the sector

The French waste sector represents EUR 23.6 billion (source: *Les comptes de l'environnement en 2015, MEDDE, 2018*[1]). In 2016, France produced 4.6 metric tons of waste per inhabitant. 73% is generated by building activities, 15% by commercial and industrial activities, 12% by municipalities and households (source: *ADEME 2019)*. Regarding non-hazardous waste, 28% is landfilled, 2% were incinerated without energy recovery and 70% are subject to treatment for recovery (source: *Eurostat 2016 data)*; the Group believes the recycling portion will grow in the future.

In 2019, the Ministry of Ecological and Solidarity Transition *(Ministère de la Transition Ecologique et Solidaire)* reaffirmed the commitments of the "Circular Economy" roadmap of April 2018, with its bill on combating waste and the circular economy, adopted during its 1st reading in the French National Assembly on December 20, 2019 (debates scheduled to end in early 2020), with the following main objectives and measures:

- waste reduction (-15% of household waste in 2030 compared to 2010, and -5% of waste from economic activities);
- reduction in the landfilling of non-hazardous waste (strengthening the objective of the 2018 roadmap);
- target to reach 100% of recycled plastic by January 1, 2025 and end single-use plastics by 2040;
- mandatory collection of biowaste by January 1, 2022;
- harmonized system of sorting instructions on household packaging;
- energy recovery from at least 70% of waste unable to undergo material recovery by 2025.

2) Description of activities

R&R France is active throughout the entire waste cycle: collection, sorting, recovery and elimination (material recovery, biological

(1) Estimated total current national expenditure on waste management.

recovery, energy recovery, landfilling), soil remediation, wastewater treatment and industrial maintenance.

R&R France has been active in France's waste sector since its incorporation in 1919. The Group has substantial treatment capacity, a diversified portfolio of contracts, special expertise in recovery and treatment (sorting, recycling, landfilling, incineration and methanization), solid geographic network coverage in France, and the ability to innovate by offering new treatment and recovery solutions. Today, R&R France is active in innovative collection solutions by offering alternative incentive-based local collection methods; in the management and recovery of household, industrial and commercial waste, in the recovery of ferrous and non-ferrous metals, cardboard, wood, plastic and compost from waste, and in the production of energy – heat and electricity – from waste. R&R France serves municipal customers, large companies and small and medium-sized businesses.

In 2019, R&R France provided waste collection services to nearly 11.9 million inhabitants and 42,200 industrial and commercial customers. The Company treated over 18.3 million metric tons of waste. As of December 31, 2019, R&R France operated 68 composting platforms, 33 incineration sites (all sites with an energy recovery capacity), and 486 sorting and transfer stations.

In 2019, the Group treated 1,882,716 metric tons of ferrous and non-ferrous metals and expanded its range of services to industrial customers in France and abroad.

5.3.2.2 R&R UK and Scandinavia

The Group operates in the United Kingdom primarily through its SUEZ Recycling and Recovery UK subsidiary. The Group is also active in waste collection and treatment activities in Sweden.

In 2019, R&R UK and Scandinavia's contribution to the Group's consolidated revenues totaled EUR 1.2 billion; the business unit employed 6,503 people as of December 31, 2019.

1) Specific features of the waste sector

United Kingdom

In the United Kingdom, the rate of household recycling rose slightly by 0.3% to stand at 45.1% in 2018-2019. Official figures published in November 2019 showed that East Riding of Yorkshire was the municipality with the highest recycling rate (64.8%), while Newham was the municipality with the lowest rate (17%). Lewes recorded the highest increase of the year, up from 27% to 40%.

The non-hazardous waste market is estimated at GBP 8.8 billion (41% for industrial waste collection, 34% for construction waste collection, 21% for household waste collection and 4% on other types of waste) with an expected annual growth of 2.3% between 2020 and 2025. Profits almost topped GBP 1 billion in 2019-2020[1].

Several factors have impacted the sector:

- the long period of uncertainty surrounding Brexit had a negative impact on several sectors and resulted in limited investments in 2019, and had a knock-on effect on short-term collection contracts;
- an increasing awareness of environmental issues has resulted in a reduction in the quantities of waste sent to landfill sites and an increase in recycling rates;
- an increase in population and an upturn in economic activities and construction over the last five years have led to an increase in the volumes of waste and recyclable materials.

Volumes of waste material should gradually decrease over the coming years. Households and manufacturers will generate increasing amounts of recyclable waste but will adopt an approach focused on reusing and designing products from recycled materials. The growth in volumes of recyclable waste should offset the fall in waste volumes.

Sweden

The Swedish waste sector represents around 141 million metric tons of waste. In this country of nine million inhabitants, this figure may be explained by the significant percentage of waste from the mining, paper and cardboard industries and from the treatment of sludge and dredging. In 2015, Sweden produced 4.7 million metric tons of household waste. This volume represented a 4% increase compared to 2014. Only 0.7% of household waste was landfilled, 35% was recycled, 16% was treated biologically and the remainder was incinerated, producing hot water for urban heating systems as well as electricity (48%). In 2015, each Swedish inhabitant produced 478 kg of municipal waste (+4% *versus* 2014). Furthermore, the government's will is to increase the recycling of organic waste from households. The number of biogas reactors increased to 282 with a production capacity of 1.9 TWh of biogas in 2015 (source: *Swedish Waste Management Report 2015, Biogasportalen.se)*.

Revenues from the Swedish waste market have been estimated at SEK 40 billion per annum. There are two types of waste operators in Sweden: private companies belonging to the recycling industries (ÅI) and municipal companies operating under Waste Sweden. ÅI employs almost 6,000 people and generates revenues in excess of SEK 20 billion annually.

2) Description of activities

R&R UK

R&R UK employs more than 5,400 people. In 2019, R&R UK managed over 5.4 million metric tons of waste and served 1.7 million inhabitants and around 23,620 industrial and commercial customers. R&R UK is active across the entire waste cycle. The Company is backed by SUEZ's experience, which allows it to participate in all tenders in this sector, and its extensive expertise in the provision of waste management services to local authorities through private finance initiatives (PFI) and public-private partnerships (PPP).

R&R Sweden

SUEZ Recycling AB, a wholly owned subsidiary of the Group, is active across the entire waste cycle, including waste sorting at customers' premises, collection, pretreatment, recycling and treatment of all types of waste, excluding potentially radioactive residues from nuclear processes, incineration plants and the treatment of electrical and electronic waste. In 2019, R&R Sweden

(1) Source : www.ibisworld.co.uk

served almost 1.9 million people and around 24,601 industrial and commercial customers through its waste collection activities. It processed over 1.5 million metric tons of waste. SUEZ Recycling AB employs 1,103 people.

5.3.2.3 R&R Germany and Benelux

The Group operates in Belgium, Germany, Luxembourg and the Netherlands through its subsidiaries SUEZ R&R Belgium, SUEZ Deutschland, Lamesch (Luxembourg) and SUEZ Recycling & Recovery Netherlands. Although they operate independently in their own markets, these various subsidiaries form a joint business unit, R&R Germany and Benelux. This gives them added value through various shared operations, particularly in terms of methodologies and standardization (primarily in waste treatment and energy management and consolidation of collected volumes). As a consequence, R&R Germany and Benelux can operate on more favorable terms on the secondary raw materials market. The organization can also provide centralized coordination and sharing of good practices in areas such as finance, human resources, asset management, purchasing, information and communication technologies (ICT), health and safety, communications and legal affairs.

In 2019, R&R Germany and Benelux's contribution to the Group's consolidated revenues totaled EUR 1.6 billion. The R&R Germany and Benelux business unit employed 6,493 people as of December 31, 2019.

1) Specific features of the sector

Germany, the Netherlands, Luxembourg and Belgium are European leaders in waste management and recycling, and their regulatory framework is well ahead of the European average. In this region, less than 1% of solid municipal waste is sent to landfill sites. On average, 60% of solid municipal waste is recycled and 40% undergoes an energy recovery process.

The Netherlands

In the Netherlands, 80% of waste is recycled and 16% is recovered. The government recently announced the objective of having a 100% circular economy by 2050. By 2030, the aim is to reduce the use of raw materials such as minerals, fossil fuels and metals by 50%. The volume of residual waste should be reduced to 100 kg per person in 2020, and 75% of municipal waste should be collected, sorted and processed separately. At the end of December 2017, the new national waste management plan (LAP3) entered into force in the Netherlands. This has had a limited impact on the licenses operated by SUEZ.

Of a total of 141 million metric tons of waste generated in the Netherlands, 70% is from building and demolition activities, 20% from commercial and industrial activities, 6% from municipalities and households and 4% from agriculture. Of this total, 4% is hazardous waste *(Eurostat 2018 – 2016 data)*. Regarding household waste, 48% is incinerated, 51% recovered and the remainder landfilled (source: *Eurostat 2017 – 2014 data)*. Discussions concerning deposits on plastic bottles resulted in a decision to maintain the current system that targets bottles containing more than one liter of liquid.

In addition, deposits on bottles are currently being discussed for small plastic bottles and cans.

Belgium

In Belgium, waste sorting regulations have been implemented in all regions. These regulations have reduced household waste to 146 kg per year and per person. Manufacturers and SMEs must now sort out their waste into several different streams (20 in Flanders and 14 in Wallonia). In Belgium, the current trend is focused on reuse (second-hand products, sharing and rental platforms such as Peerby, Wijdelen, etc.).

In Belgium, discussions concerning the introduction of a deposit did not lead to the proposed scheme being adopted by any of the country's regions.

Of a total of 63 million metric tons of waste generated in Belgium, 31% is generated by building and demolition activities, 61% by commercial and industrial activities 8% by municipalities and households and 0.4% from agriculture *(Eurostat 2018 – 2016 data)*. Of this total, 6% is hazardous waste *(Eurostat 2018 – 2015 data)*. Regarding household waste, 1% is landfilled, 44% is incinerated and 55% is recycled or recovered (source: *Eurostat 2016 – 2014 data)*.

Germany

In Germany, the incineration market struggled in 2019, as facilities had already reached their maximum capacity in 2018 and the volume of combustible waste increased in 2019. The hazardous waste market was also extremely complex. Capacity problems have become increasingly evident, which led to elimination delays. In January 2019, new packaging regulations came into force. The government's objective is to increase the recycling rate of used packaging. Both producers and major brands must improve the recycling rate from the packaging collected. SUEZ Deutschland is well positioned with its sorting sites at Ochtenburg and Oelbronn.

In such an environment, the trend is to improve the sorting at source and increase recycling with producers assuming a greater responsibility and working in partnership with the waste management operators.

2) Description of R&R activities

Germany

SUEZ Deutschland provided waste collection services to some 4.8 million people and nearly 20,935 industrial and commercial customers in 2019 and treated almost 927,897 metric tons of waste. The Group's presence is concentrated in western and southern Germany, particularly in commercial and industrial waste collection and selective collection. It also has a solid position in the incineration segment through its Zorbau site in the Leipzig region as well as in the sorting of household packaging through its site in Ochtenburg, and a new sorting plant in Oelbronn which started production in the second quarter of 2019, offering a maximum capacity of 100,000 metric tons per annum of used packaging. A second sorting site with a capacity of 36,000 metric tons was renewed in the fourth quarter of 2019 at Oelbronn.

In 2019, SUEZ Deutschland's contribution to the Group's consolidated revenues totaled EUR 567 million. SUEZ Deutschland employs 1,881 people.

The Netherlands

SUEZ R&R Netherlands is involved in the entire waste cycle and, in 2019, through its collection activities, served around 1 million people, 63,477 commercial and industrial customers and processed 610,651 metric tons of waste. In 2019, SUEZ R&R Netherlands employed 2,115 people and its contribution to the Group's consolidated revenues was EUR 546 million.

Belgium

SUEZ Belgium aims to provide standardized solutions. R&R Belgium has a very dominant position in the collection and processing sectors, particularly for waste from industrial and commercial activities. In 2019, SUEZ R&R Belgium served 2.9 million inhabitants and 47,800 industrial and commercial customers. In 2019, SUEZ R&R Belgium employed 2,497 people and its contribution to the Group's consolidated revenues was EUR 512 million.

5.3.2.4 IWS

The Group is active in the hazardous waste market through its various sites throughout Europe. All of SUEZ's hazardous waste treatment assets in Europe (Netherlands, Belgium, Germany, France, Italy, Spain) and the management of hazardous waste streams have been grouped together in a single business unit, Industrial Waste Specialties (IWS), within the Recycling & Recovery Europe division. IWS consolidates all activities related to hazardous waste for the Group in Europe. The dedicated sales team at IWS is continuously developing its expertise so that the economic and environmental demands of key industrial customers can be met. From general services to specialized services in the area of waste recovery, SUEZ meets the European integration and traceability requirements, typically requested by the major operators in the different European industrial sectors.

IWS was created as a response to various objectives of the SUEZ Group. Firstly, IWS makes it possible to better serve industrial customers, primarily those operating at European level, and to construct an ambitious and global development strategy in this segment. This focus on the hazardous waste industry also enables greater synergies at the Group's treatment sites throughout Europe and contributes to the creation of value by optimal use of available capacity on a European scale, with waste able to cross borders for the purposes of its recovery.

Industrial production in Europe is currently in a recovery phase and, as such, IWS will play a major role in SUEZ's strong ambitions for the industrial segment. In 2019, SUEZ IWS's contribution to the Group's consolidated revenues totaled EUR 501 million. IWS employed 1,595 people as of December 31, 2019.

1) Specific features of the sector

The global hazardous waste market represents around 50 million metric tons (excluding mining waste) and EUR 2.6 billion of revenues in a variety of customer segments (chemicals, mining, pharmaceuticals, energy, construction, petrochemicals, metallurgy, etc.). The market in general is in a situation of undercapacity leading to an increase in treatment prices. This situation is expected to continue in the future due to the lack of new incineration capacities and/or landfill capacities, the trend toward closing internal units in certain companies and the absence of major developments anticipated for alternative treatment methods (co-incineration, etc.). The market has been globally stable in terms of volume in recent years.

The hazardous waste market is based on international regulations that apply strict rules and substantially limit exports of hazardous waste outside of Europe (Basel Convention, etc.). The European area is therefore the relevant area of operation, as waste may travel within this area, namely for the purposes of its recovery (Waste Framework Directive, etc.). National regulations also affect activities related to hazardous waste. Overall, legislation is moving toward a tightening of controls and restrictions. Regulations are also increasingly geared towards increasing waste recovery to develop the circular economy.

With the proliferation of urban sites (reclamation of derelict industrial and urban land, major transport infrastructure, etc.), volumes of excavated soil are increasing significantly (+10 million metric tons of soil from boring machines in the Greater Paris area). At the same time, the regulations in France require the future recovery of 70% of these volumes. This requires in-depth "soil" expertise and a variety of local treatment and recovery equipment.

Germany

A relatively stable and open market in industrial terms with a network of treatment facilities in a situation of under capacity made up of major German operators (including *in-house* industrial operators at industrial parks) and public operators. It is in this context that SUEZ has identified establishing hazardous waste treatment facilities in Germany as a priority.

Denmark/Scandinavia

A generally closed market, dominated by a single operator.

Belgium & the Netherlands

Markets that place importance on treating waste locally, without being completely closed to export. They are open to imports and competition is solid.

United Kingdom and Ireland

An under capacity market in terms of waste treatment and one that remains in transition, dominated by the uncertainties surrounding Brexit.

Italy

The third-largest hazardous waste market in Europe is dominated by the north of the country (Lombardy, in particular) and Sicily. Italy is geared toward export (approximately 15%) due to a poor energy recovery capacity linked to unfavorable legislation and major regional political/public bottlenecks (NIMBY phenomenon).

The hazardous waste market is dominated by large multi-utility operators that have their own local treatment facilities (a2a, ACEA, Hera Ambiente). Since 2018, the Italian market has experienced an ever-greater concentration and ramping up of acquisitions (the acquisition of Teseco by Hera Ambiente, the acquisition of Mecomer by Séché, the acquisition of Solveko by Tradebe, etc.).

Spain

Renewed economic momentum in Spain is conducive to market growth. Regulations have evolved with increasing recovery (influence of the Circular Economy) and the ongoing consolidation of a fragmented market.

France

The second-largest European market, structured around three well-established major players whose economic fundamentals remain healthy. As a result, this market has not experienced significant consolidation. In France, the decline in the industrial base has been offset by increased imports of hazardous waste from neighboring countries and from even further afield, with a tendency to saturate the capacity of thermal treatment plants.

2) Description of activities

40% of the hazardous waste treated outside production sites is managed by 6 major operators. IWS is one of the largest operators in the hazardous waste sector in Europe but one of the few to have such extensive industrial and commercial coverage on a European level.

The market includes disparate segments due to the diverse nature of the sectors that generate such waste. IWS responds to this challenge by offering a wide range of treatment facilities. IWS has more than 60 different tools that it uses to collect, sort, group, transfer, prepare, recycle, recover or store all types of hazardous waste (with the exception of radioactive waste). A distinctive feature of the activities of IWS is fuel preparation for cement manufacturers. In Europe, its recovery and elimination capacity for all hazardous industrial waste combined is almost 3 million metric tons per year. IWS also operates outside the European Union through remediation activities for polluted soil and sites and the importing of specific types of waste for treatment in Europe.

This diversity allows IWS to respond to increasing demand for waste recovery from customers. Through the experience gained in Europe in recent years, the development of tools such as Neoter allows the Group to target high-growth markets (Qatar, Amsterdam, etc.).

5.3.3 Presentation of the Group's International activities

In addition to Europe, the Group operates in the water and waste sectors in more than 15 countries. As a result of selective growth abroad, this position is based primarily on a strong presence in five regions:

- North America;
- Asia;
- Africa, Middle East and India;
- Australia;
- Italy, Central and Eastern Europe.

The International division is organized around five geographical Business Units: North America, Asia, AMEI (Africa, Middle East, India), Australia, and ICEE (Italy, Central and Eastern Europe) to enhance trade efficiency and proximity with local customers. It also includes four businesses: Water Services, Waste Services, DBO (design, build, operate: the design, construction and operation of water treatment plants), and Industrial Solutions to capitalize on all of the Group's expertise. Each business unit and its pluridisciplinary teams are responsible for managing and developing all the Group's business activities for municipal and industrial customers in their assigned area.

5.3.3.1 The Group's activities in North America

1) Specific features of the sector

United States

The Group estimates that the market share of private operators is 8%. The sector is characterized by long-term stability and a growing demand focused on the quality of service. The market is highly fragmented (over 52,000 water supply systems and over 17,000 systems for wastewater), which offers major opportunities for consolidation.

Canada

The government is in the process of setting up new requirements to reduce the volume of waste sent to landfill, thereby encouraging the search for alternative waste treatment solutions. A program of subsidies for the incineration of biomethane has been implemented, with an emphasis on organic waste treatment projects. The Group currently has a limited portfolio of activities in Edmonton, Swan Hill and Montreal.

2) Description of activities

United States (Water)

The Group is active in the management of water and wastewater services in the United States through SUEZ North America and its subsidiaries, SUEZ Water Inc. and SUEZ Water Advanced Solutions (formerly USG).

SUEZ Water Inc. (formerly United Water) is present in 17 states, mainly in the Midwest and Northeast of the country, and is active in two types of business activity:

- "regulated activities" (primarily in the field of drinking water services): the water production/treatment assets are operator-owned; this sector is characterized by its high capital intensity and lower financial risk, since rates are fixed by the regulators (Public Utility Commissions) of the 50 states, partly based on the investment required;
- service contracts (primarily in the field of water and wastewater treatment and network management services): operators enter into Operations and Maintenance contracts with municipalities relating to processing sites or other assets that continue to be city property; this sector is characterized among other things by low capital intensity and lower margins. These contracts are generally for between 3 and 20 years, although contracts have also been signed for a longer term.

In 2018, an agreement was signed with PGGM, a leading Dutch pension fund manager, for the sale of 20% of the capital of SUEZ Water Resources Inc., the parent company for all regulated water activities in the U.S, for a cash consideration of USD 601 million. In this new long-term partnership, the Group and PGGM agree on an ambitious asset base growth plan. This transaction was completed on March 1, 2019.

In 2019, these activities contributed EUR 998 million to the Group's consolidated revenues, with 52% from regulated activities, 25% from service contracts, 13% from Advanced Solutions and 10% from water treatment solutions. These activities employed approximately 2,916 people as of December 31, 2019. This business unit has developed a balanced portfolio between these two key activities, which are considered complementary by the Group.

In 2019, SUEZ Water Inc. had a portfolio of 15 "regulated" activities in six different states. Non-regulated activities concerned 65 service contracts extending up to 50 years of operations.

Canada (Waste)

The Group primarily operates in the area of waste management activities. In 2014, the Group acquired the remaining 40% interest in Aecom Technology, after holding a 60% interest since 2008. This company has significant management contracts in Alberta, operating the compost site in Edmonton and the toxic waste incinerator in Swan Hill. In 2019, SUEZ won two major contracts for the design and construction of the St. Laurent composting infrastructure (annual capacity of 50,000 metric tons) and a biomethanization facility (annual capacity of 60,000 metric tons).

5.3.3.2 The Group's activities in Asia

In 2019, the contribution of the Asia business unit to the Group's consolidated revenues totaled EUR 548 million. As of December 31, 2019, the Group employed 3,308 people in this region.

1) Specific features of the sector

Water

The Asian continent comprises countries with a range of different needs and situations in terms of water and waste management services. This sector has seen an increased contribution of private/public partnerships. Several countries, particularly in Southeast Asia, need to develop infrastructure to provide access to basic services, although in other areas *(e.g.* Singapore) the level of maturity is close to European standards.

In Asia, local operators play an important role due to their level of competitiveness and close ties with the government, since governments in this region often prefer to use homegrown operators. However, international operators can provide expertise in areas where the local expertise is insufficient.

In China, the water services market is dominated by operators such as Beijing Enterprises Water Group (BEWG) and Guangdong GDH Water. The drinking water and wastewater treatment market is expected to experience sustained growth with the ongoing participation of private operators under the impact of industrialization and massive urbanization, added to the improvement in living standards of the population, more stringent regulations for the protection of the environment and controls over pollution levels, as well as pressure on the availability of water resources.

The "Belt and Road" initiative, which is increasing China's global influence, is becoming a major contributor to the financing and implementation of infrastructure projects in Asia, but also in Eastern Europe and Africa. This opens up an extensive range of potential for projects for the Group in the area of drinking water and wastewater infrastructure, to support large Chinese investment groups.

Waste

The waste market in Asia also covers regions experiencing a range of different situations and levels of maturity. The collection rate in the region is around 70% (WB source). Nearly 50% of these volumes are sent to landfill and only 9% are recycled. Cities such as Hong Kong, Singapore and mainland China are increasingly developing sorting at source and recycling programs for non-liquid but also organic materials (50% of volumes). Private operators are increasingly involved in projects with local municipalities, while the public authorities are developing adequate structures for greater transparency and quality. Apart from these targeted areas, the market is not very attractive to private operators, although the situation is changing in some countries with the arrival of new opportunities.

The waste sector in China is in the early stages of development and is gradually opening up to international operators; it is also undergoing sustained growth in terms of volumes and urbanization rates. The Group expects to see a significant growth in household waste. In China, the 13th five-year plan also forecasts significant growth in the treatment of municipal solid waste with the development of energy recovery plants. China also produces significant volumes of hazardous waste that does not undergo any effective treatment process. This sector should experience sustained growth with the implementation of more stringent environmental regulations and the creation of regulatory entities.

2) Description of activities

Water

The Group has a presence in China through its water management concession in Macau and its 36 subsidiaries established through partnerships with local authorities for drinking water production and distribution, wastewater and sludge treatment. It operates under several types of contracts, such as BOT contracts for building and renovating water treatment plants, Operation and Maintenance (O&M) and concession contracts.

The Group operates in China in the water sector. Following the creation of SUEZ NWS in January 2017, Sino French Holdings and all the other operating entities were incorporated into the new organization, with SUEZ as the majority shareholder owning 58%.

The Group is continuing to strengthen its presence in China through a policy of entering into partnerships and by securing major contracts with municipal and industrial customers. The Group also operates in China through its Treatment Infrastructures business line, especially in the industrial sector. At present, the Group has completed over 260 design-build contracts in China.

In all, the Group provides drinking water services to 20 million inhabitants in China.

Waste

The Group has been operating in Hong Kong since 1998 in the waste sector through Sita Waste Services, which is now part of SUEZ NWS. Sita Waste Services operates six major municipal waste transfer stations and two out of the three strategic landfills (with close to 5 million metric tons of waste landfilled per year in those two facilities). The Group collects nearly 674,000 metric tons of household, commercial, industrial, agricultural and hospital waste in Hong Kong and Macau every year.

In Macau, directly or through its subsidiary, SUEZ offers collection and cleaning services for the entire city, and operating services for the landfill specialized in residues (RPIFHW) from the local incinerator.

The Group has also grown in mainland China through joint ventures with local partners. The Group is primarily targeting the hazardous waste treatment markets that will continue to grow over the next few years. The Group is also interested in opportunities on the recycling market and in the area of soil recovery.

In Taiwan, SUEZ operates an energy recovery plant and a hazardous waste facility in the city of Kaohsiung. In Thailand, SUEZ plans to build a plastic recycling plant with a capacity of 30,000 metric tons per year, as well as an industrial waste recovery plant in Chonburi.

5.3.3.3 The Group's activities in Africa, the Middle East and India

In 2019, companies in the Africa, Middle East and India region contributed EUR 1.1 billion to the Group's consolidated revenues. As of December 31, 2019, the business unit employed 7,180 people.

A) AFRICA

1) Specific features of the sector

Water

The demographic growth of the African continent along with a very high rate of urbanization imply a massive requirement for water and wastewater infrastructures. The low level of maintenance also implies the premature ageing of certain infrastructures which then require refurbishment. Historically, governments fund these types of projects; however, funding is also provided by multilateral donors (with the World Bank being the main source of funds). The African market is dominated by international operators, and in the past Veolia and SUEZ have been the operators with the most widespread presence. However, African companies are favored for "EPC" (Engineering/Procurement/Construction) projects.

2) Description of the activities of SUEZ

Water

In Morocco, the Group is active in the water sector through Lydec, in which it has a 51% stake, with the remaining 49% owned 34.75% by Fipar Holding and RMA Wataniya, and the remainder traded on the Casablanca Stock Exchange since 2005. Lydec is in charge of water distribution, wastewater treatment and the electricity supply for 4.2 million inhabitants in Greater Casablanca, on the basis of a 30-year contract signed in 1997. In 2019, Lydec contributed EUR 677 million to the Group's consolidated revenues, broken down into activities related to electricity (70%), and drinking water distribution and wastewater treatment (30%).

As of December 31, 2019, Lydec employed 3,346 people.

In Algeria, the Group has been present since 2006, with a management contract to which it contributes its expertise and provides experts to the Société des Eaux et d'Assainissement d'Alger (SEAAL) in order to help improve drinking water distribution and wastewater services for the cities of Algiers and Tipasa. A dedicated program for professional and managerial knowledge transfer is being implemented by SUEZ.

Present in Egypt for several decades, SUEZ currently operates two water treatment plants, one in Alexandria and one in Cairo. In addition, SUEZ since November 2018 has started to build an extension to the current water treatment plant in Alexandria for which a financing agreement was signed in 2017 between the Egyptian government and the French Development Agency.

In sub-Saharan Africa, SUEZ remains very active through its drinking water production and wastewater treatment plant construction business activities, namely in Burkina Faso, Mali, Kenya, Angola, Senegal, Uganda and Cameroon.

The Group is also present in many African towns and cities of all sizes through its UCD activities, setting up compact water treatment units in an extremely short time frame. In particular, the Group signed a contract in 2018 for the provision and installation of 40 compact units for the production of drinking water to supply 18 cities in Ivory Coast.

Waste

In Morocco, the Group is present in the waste sector through R&R Morocco, responsible for urban cleaning, household waste collection, transport to treatment facilities in major cities such as Tangier, Oujda and Tetouan, as well as industrial waste management for local and international customers.

B) MIDDLE EAST

The Middle East's contribution to the Group's consolidated revenues stood at EUR 121 million and 1,237 people were employed in this area as of December 31, 2019.

1) Specific features of the sector

Water

In the Gulf countries, the scarcity of water resources is accentuated by increasing demand, linked to a constant rise in population and an ever-increasing rate of urbanization. The development of an industry in the Gulf countries to diversify their economy also contributes to increasing water requirements, particularly for the oil industry.

Faced with the increasing demand for water and wastewater services, a strong political will for the preservation of water resources has emerged in the Gulf countries. The reform includes major investments in infrastructure, as well as improving the efficiency of the distribution network and wastewater services.

Thus, each country has drawn up national strategies or programs that plan over several years the work required and investments to be earmarked in this sector and make use of the expertise of private operators, particularly through public-private partnerships. Large infrastructure contracts, particularly for the desalination of seawater and the treatment and reuse of wastewater, are ongoing in several countries, as are major contracts for the operation and maintenance of water and wastewater services (in Qatar and Saudi Arabia in particular).

Waste

Waste management has become an important component of the roadmap of countries in the Middle East, and in the first years of the 21st century they had already launched investment programs to develop new and upgrade existing infrastructure.

Governments and municipalities are developing strategies to reduce the quantity of solid waste transferred to landfill sites. These strategies include plans to develop waste-to-energy (WTE) facilities and to generate energy to complement the electricity needs of a country and diversify its energy mix. The willingness of the authorities to reduce the amount of waste sent to landfill sites creates opportunities for the collection, sorting and treatment of municipal and industrial waste, with a view to recycling or recovering energy from such waste.

2) Description of the activities of SUEZ

Water

The Group has a historic presence in the Middle East. In the 1950s, SUEZ discovered a drinking water source in Riyadh which allowed the capital of the Saudi kingdom to remain in Riyadh. In 1975, it also built the first reverse osmosis desalination plant in Saudi Arabia, and signed 20 DBO contracts in the country between 1975 and 1986. It built the world's largest hybrid desalination plant in the United Arab Emirates in 2003 and financed, built and has operated since 2018 the largest desalination plant in the Sultanate of Oman.

The construction and operation of the largest wastewater treatment plant in Qatar and the operation (under a BOT (Build, Operate, and Transfer) contract) of the largest sewage treatment site in the Middle East in Jordan are also key references for the Group. In addition to its water treatment activities, between 2008 and 2017, the Group also managed the water services of large cities such as Jeddah, Saudi Arabia. Finally, in December 2019, SUEZ secured the contract for the operation and maintenance of the sewerage networks and wastewater treatment infrastructures in Northern Qatar.

Waste

SUEZ has been established in the waste treatment sector in the United Arab Emirates since 1977, through its subsidiary SUEZ Middle East Recycling, the country's first private company in this sector. The Group has developed its activities in the collection of industrial and commercial waste, as well as in the collection of medical waste and in the cleaning of streets and industrial sites.

In the Sultanate of Oman, through its SUEZ Al Basheer joint venture, 60% owned with Omani partners, since 2010 the Group has signed several contracts for the construction, operation and management of several landfill sites for municipal and industrial waste across the country. These contracts include the construction and operation of the Al Amerat Municipal waste landfill and, more recently, the operating contract for the Barka landfill site, which includes a system for biogas collection and leachate treatment. The Group has also positioned itself on the market by developing its management of industrial waste and securing the contract to operate the industrial waste landfill site at Sohar and Duqm.

In Qatar, in 2017, SUEZ also secured the contract to decontaminate the soil from the Al Karaana lagoons located south-west of Doha. This project, which was completed six months in advance, is the largest contract secured by the Group in the area of soil decontamination and its first major reference in the Middle East.

The Group has joined forces with its partner Five Capital Fund I to sign an agreement to acquire a majority stake in Environment Development Company (EDCO), a Saudi hazardous waste management company.

C) THE INDIAN SUB-CONTINENT (WATER)

In 2019, India's contribution to the Group's consolidated revenues totaled EUR 132 million. The Group employed 697 people in the region.

1) Specific features of the sector

Water is a fundamental concern for the Indian central government, which launched a five-year program (AMRUT) in 2015 to develop the necessary infrastructure to provide access to running water and wastewater treatment. Another program (Jal Jeevan Mission) was launched to provide all households with access to running water by 2024. At present, less than 30% of households have access to running water. By 2050, India's water consumption is expected to double, and the government would like to treat wastewater, and protect rivers and underground reserves (the primary source of drinking water for millions of people). The Indian water sector represents a growth market for SUEZ as it is an area where it can implement its know-how and expertise to manage and improve the service in the context of large-scale and long-term contracts. Historically, the water market in India has attracted low levels of private investment due to the lack of financial collateral and low rates. Desalination and reuse projects and 24/7 water supply contracts could also offer new opportunities.

2) Description of the activities of SUEZ

SUEZ has actively followed developments in the Indian water sector in the 30 years since it has been present in the country, particularly the emergence, supported by plans and policies at the federal and national level, of projects in the form of public-private partnerships that are aimed at improving and expanding the water supply and the distribution infrastructure and services in Indian cities.

The Group has provided its expertise for the management of water systems in the cities of Coimbatore, Davanagere, Putter, Udupi and Mangalore. In the city of Lucknow (Uttar Pradesh), SUEZ manages the entire sewer network and all wastewater treatment plants and is the first and only service provider of pipeline infrastructure in an Indian city.

In order to accelerate its growth on the industrial wastewater treatment market, SUEZ acquired a majority stake in the Indian company Driplex, one of the leading players on the industrial market in India. The Driplex investment forms part of SUEZ's development strategy aimed at increasing its business activities with industrial companies and internationally. SUEZ also operates in Sri Lanka and in Bangladesh.

5.3.3.4 The Group's activities in Oceania

In 2019, the contribution of the Australia business unit to the Group's consolidated revenues totaled EUR 1 billion. As of December 31, 2019, the Group employed 2,272 people in this region.

1) Specific features of the sector

Water

The Group believes that the Australian water sector suffers from acute problems linked to water resources due to recurring, long-lasting droughts and from the impact of global warming. This sector offers significant growth opportunities due to the increased use of desalination and reuse of post-treatment wastewater.

Infrastructure is well developed in this country and needs to be extended. The main challenge is to ensure the renewal and maintenance of the infrastructure while improving performance and maintaining an affordable price for the end user.

Waste

In 2017-2018, the estimated size of the waste sector in Australia was approximately AUD 13.5 billion (EUR 8.5 billion) (source: *IBISWorld)*. In recent years, most governments have set targets to reduce the amount of waste sent to landfills and increased landfill site duties (imposed and regulated by each state) intended to reduce the amount of waste generated and to promote recycling and recovery.

In 2018, the Queensland Government announced the introduction of a waste disposal levy on landfill of waste per July 2019 to take account of the volume of waste sent from neighboring states such as New South Wales. In this context, the demand for waste recycling and recovery technologies involving sorting, composting and alternative fuel production continues to grow. The federal government also announced the implementation of the export ban on recyclable waste from July 2020, most of which was previously sent to Southeast Asia.

2) Description of the activities of SUEZ

Water

SUEZ is the largest private O&M contractor in the municipal sector, supplying drinking water to 7 million people and wastewater treatment services to 3.5 million people. SUEZ services to municipal and industrial customers include the treatment of drinking water, desalination, wastewater treatment, reuse of water and bio-solids management.

Resource recovery is progressing rapidly in the water sector, in particular nutrient and energy recovery from wastewater activities. In addition, the sector is currently moving towards adopting smart solutions to achieve reductions in cost and improvements in operational efficiency.

Waste

The Group is present in the waste sector in Australia through SUEZ Recycling & Recovery Pty Ltd. Through its collection services, SUEZ now serves more than 60,787 industrial and commercial customers and over 4.7 million inhabitants.

SUEZ continues to be Australia's market leader in recovery with services including the recycling of household, commercial and industrial waste; the treatment of organic waste through composting; the treatment and recycling of medical waste; Advanced Resource Recovery Technology (ARRT) facilities; secure product destruction, and latest-generation technology waste landfills *(smart* cells®).

The government has announced a significant policy change to stop the disposal of land-based organic waste on agricultural land, and the suspension of its use in mine redevelopment in New South Wales. This decision and its immediate execution have impacted SUEZ's ability to meet a number of contractual obligations, in particular the reduction of volumes sent to landfill. SUEZ has communicated with its customers about this decision and the potential impact on providing services. At present, SUEZ New South Wales facilities continue to process mixed waste organic material and SUEZ is working with the relevant authorities as well as conducting its own independent reviews to understand and assess the impact of this government decision.

SUEZ also provides a global waste management service to major customers on a national level with a focus on the mining and food markets. The Group has over 50 national key accounts.

5.3.3.5 The Group's activities in Italy, Central and Eastern Europe (ICEE)

In 2019, SUEZ ICEE's contribution to the Group's consolidated revenues totaled EUR 536 million. ICEE employed 5,654 people as of December 31, 2019.

Through the ICEE business unit, the Group is present:

A) IN ITALY

Through its subsidiary SUEZ Italia based in Milan, the Group holds equity interests in five water and wastewater treatment companies in Tuscany (Arezzo, Florence, Pisa, Sienna and Montecatini Terme). SUEZ owns a 23.33% interest in Acea, a company listed on the Milan Stock Exchange that is active in integrated water management, energy sales and distribution, public lighting and, to a lesser extent, waste treatment. Based in Rome, Acea is the main water and wastewater treatment operator in Italy.

B) IN GREECE

Through a 5.46% equity interest in Eyath, a company listed on the Athens Stock Exchange, which manages the Thessaloniki water service.

C) IN CENTRAL EUROPE AND THE COMMONWEALTH OF INDEPENDENT STATES (CIS)

The Group has been active in the water sector for many years in several European Union member states. The Group manages, alone or through partnerships:

- drinking water and wastewater treatment services in several cities in Czech Republic, where it has been present since 1993, and is also active in the collection, recovery and treatment of municipal and industrial waste. The Group estimates that it is the fourth-largest private operator in the waste sector in this country;
- in Poland, through its subsidiary SUEZ Polska, the Group is active in the collection, recycling and recovery of municipal and industrial waste, as well as in urban street cleaning;

- in Slovenia, with the operation of the wastewater treatment plant it built in Maribor;
- in Croatia, SUEZ won three contracts between 2014 and 2015 for the cities of Porec, Osijek and Dubrovnik;
- in Serbia (in Belgrade) through a 25-year public-private partnership aimed at developing a new municipal waste management system;
- in Azerbaijan, SUEZ continues its implementation through the Boyuk Shore polluted soil treatment project, and a new training contract with Azersu, the public operator in charge of water and wastewater services.

SUEZ is also continuing its development in Eastern Europe after winning, in 2017, in a consortium with FCC – Aqualia, a contract for the city of Bucharest, Romania (modernization of the wastewater treatment plant in Glina and construction of a treatment plant for the recovery of energy from sludge).

5.3.4 Presentation of WTS activities

WTS is a unique platform in a booming industrial water market. It represents a strategic shift for SUEZ that will lead to an acceleration of its profitable growth: by doubling revenues from industrial customers and consolidating key account relationships. WTS improves the contribution of industrial customers to the Group's revenues. Finally, WTS provides SUEZ with greater balance in terms of its geographic presence, with approximately 40% of revenues generated outside Europe.

WTS offers shareholders a unique value proposition since it comprises commercial, operational and technical synergies with historical SUEZ activities. The WTS team aims to achieve EUR 200 million in synergies by 2022. Most of these are related to joint tenders, cross-selling and internalization.

In 2019, WTS contributed EUR 2,595 million to the Group's consolidated revenues. The WTS business unit has around 11,538 employees serving 50,000 customers in 130 countries and is backed by a global presence throughout the entire water treatment solutions and facilities value chain.

1) Specific features of the sector

Depending on the geographical region, WTS may compete with local or regional operators and also with other types of operators, such as producers of chemical products (including specialized chemical products), manufacturers of water-filtration and water-quality equipment, industrial companies specializing in water treatment and builders (EPC).

WTS is facing strong competition in all its activities on a global level. Competition pressure and the constant need to innovate and improve existing technologies require continuous R&D investment. Each target market has a different structure, distinct customer needs and specific regulations. The product and service portfolio of each competitor also varies depending on the regions in order to adapt to the customer and level of profitability.

2) Description of activities

WTS has recurring income that is distributed equally between its two complementary divisions:

- the Chemical & Monitoring Solutions (CMS) division provides integrated chemical treatment solutions for industrial water and process infrastructures;
- the Engineering Systems (ES) division is a major supplier of technological solutions and equipment used in water and wastewater treatment, water reuse and service outsourcing.

WTS profitable growth strategy is based on five "differentiating factors":

- a strong global presence: WTS focuses on product design and management on a global scale. It takes advantage of its international presence and a network of service and production centers around the world, where more than 10,000 employees meet the needs of 50,000 customers in all the key regions;
- a major presence throughout the entire value chain: the business unit provides a unique range of services throughout the entire value chain with state-of-the-art technologies, equipment, solutions and services that meet all the needs of industrial customers in the water sector;
- a global business network: the entity provides high value-added services to first-rate customers in all market segments and employs 3,000 sales staff to look after these key accounts;
- R&D and innovation on a global scale: WTS has a significant technological presence and R&D centers on four continents, where 400 scientists and engineers develop state-of-the-art technologies;
- a leading digital platform that creates customer loyalty: WTS digital solutions provide customers with high value-added services, including real-time monitoring and predictive maintenance. They also contribute to internal efficiency gains and provide relevant data analysis.

5.3.5 Presentation of the activities of SUEZ Consulting

SUEZ Consulting provides its expertise to municipal customers, public authorities, international financial institutions, public service agents, and private and industrial customers. In 2019, SUEZ Consulting contributed EUR 113 million to the Group's consolidated revenues. SUEZ Consulting employs 979 people and has customers in over 100 countries.

Over 40% of its business activities were carried out internationally. SUEZ Consulting is developing expertise in the energy and climate sectors and is strengthening its position as a French leader in the roll-out of digital and very high speed broadband offers. SUEZ Consulting is also continuing to expand its historical businesses in water and the environment, where it is a market leader.

1) Specific features of the sector

This sector of activity only consists of intellectual services with a remuneration mechanism based on the sale of man-days and therefore expertise. Dealing with the entire range of cross-functional territorial development problems, it is driven by powerful drivers such as:

- societal trends;
- legislative, regulatory and prescriptive changes;
- the objectives of funds from international financial institutions or state funds earmarked for the development of large infrastructures.

The sector is being driven, and will be increasingly so, by the energy and ecological transition, by the transition toward carbon neutrality of the territories, and by their adjustment to the effects of climate change. It is also driven by constant technological developments such as BIM (Building Information Modeling), digital twins, IoT (Internet of Things) and the Artificial Intelligence, which, although requiring training in ever more powerful design tools, offer the possibility of developing new services for customers. It is an activity subject to the vagaries of public procurement and changing political directions. The sector is fairly competitive in France and internationally.

2) Description of activities

SUEZ Consulting, through the wholly owned consulting subsidiary of SUEZ, Safège, provides engineering services to municipal customers, public authorities, international financial institutions, public service agents, and private and industrial customers.

As a key operator in the sustainable development sector, SUEZ Consulting supports cities and industrial sites in France and internationally throughout their ecological and energy transition and during their adaptations to the effects of climate change.

To this end, SUEZ Consulting contributes concretely to the achievement of sustainable development objectives and to the reduction of territorial inequalities. SUEZ Consulting is active at all levels of the projects offering strategic advice, masterplans, assistance with project management, design, general contracting, operational support, training and audits.

5.4 Strategy

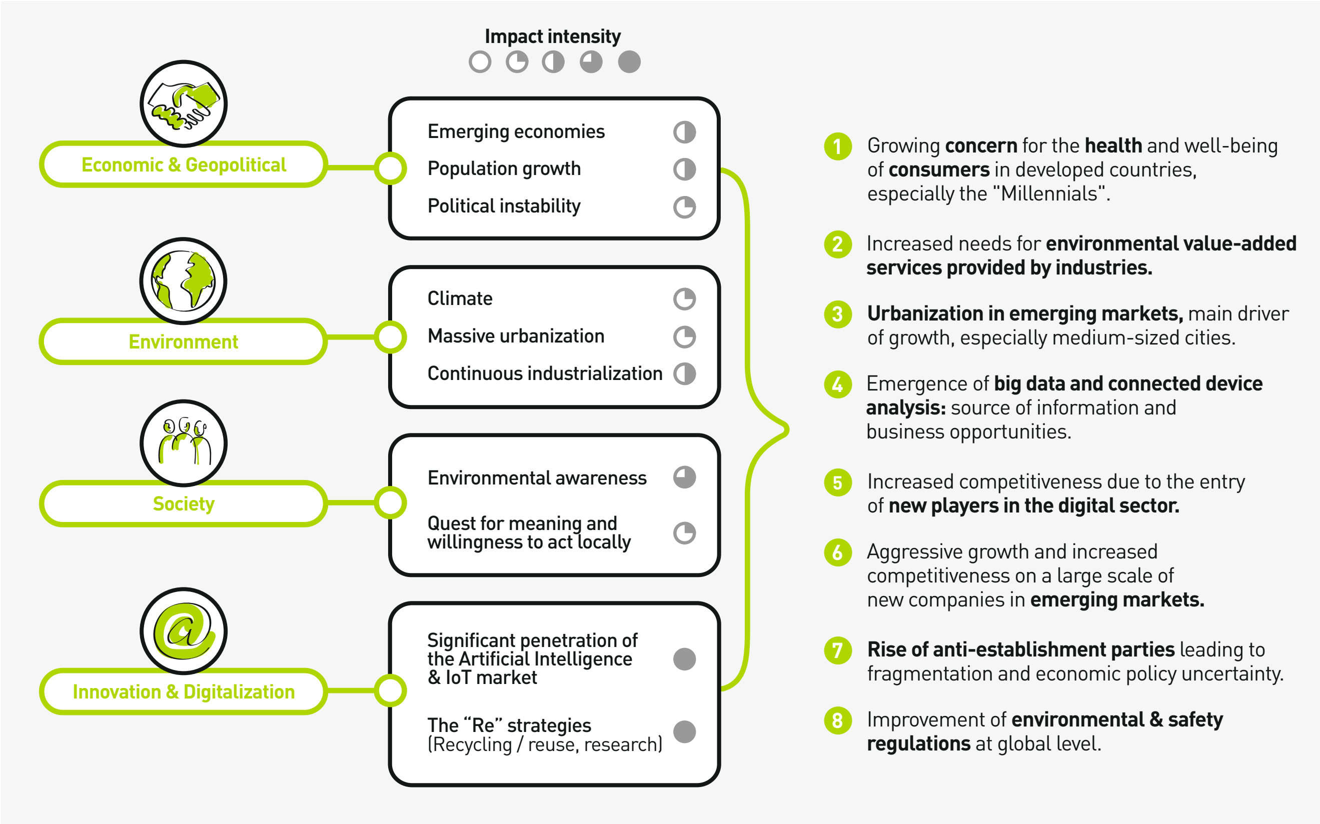
The aim of the "Shaping SUEZ 2030" plan, unveiled on October 2, 2019, is to turn SUEZ into the world leader for environmental services. The Group's aim is to become the preferred partner of its customers, employees and stakeholders, and to work together with them to restore and conserve the fundamental elements of water, air and soil from this point onwards. SUEZ is implementing a transformation strategy to achieve its vision for 2030. This strategy is based on three pillars: a more selective path to growth, simplified operational processes and a new culture that embodies the conquering spirit of SUEZ on a daily basis.

5.4.1 Vision for 2030

The "Shaping SUEZ 2030" strategic plan aims to position the Group in relation to the opportunities and the challenges of the coming decade, and to ramp up its contribution.

In a constantly changing world, there is a need to take concrete actions to jointly shape a sustainable environment, right now. In particular, the Group needs to anticipate the development of the circular economy, the emergence of new models, increased regulations and a rising awareness amongst citizens of the climate crisis and damage to the environment.

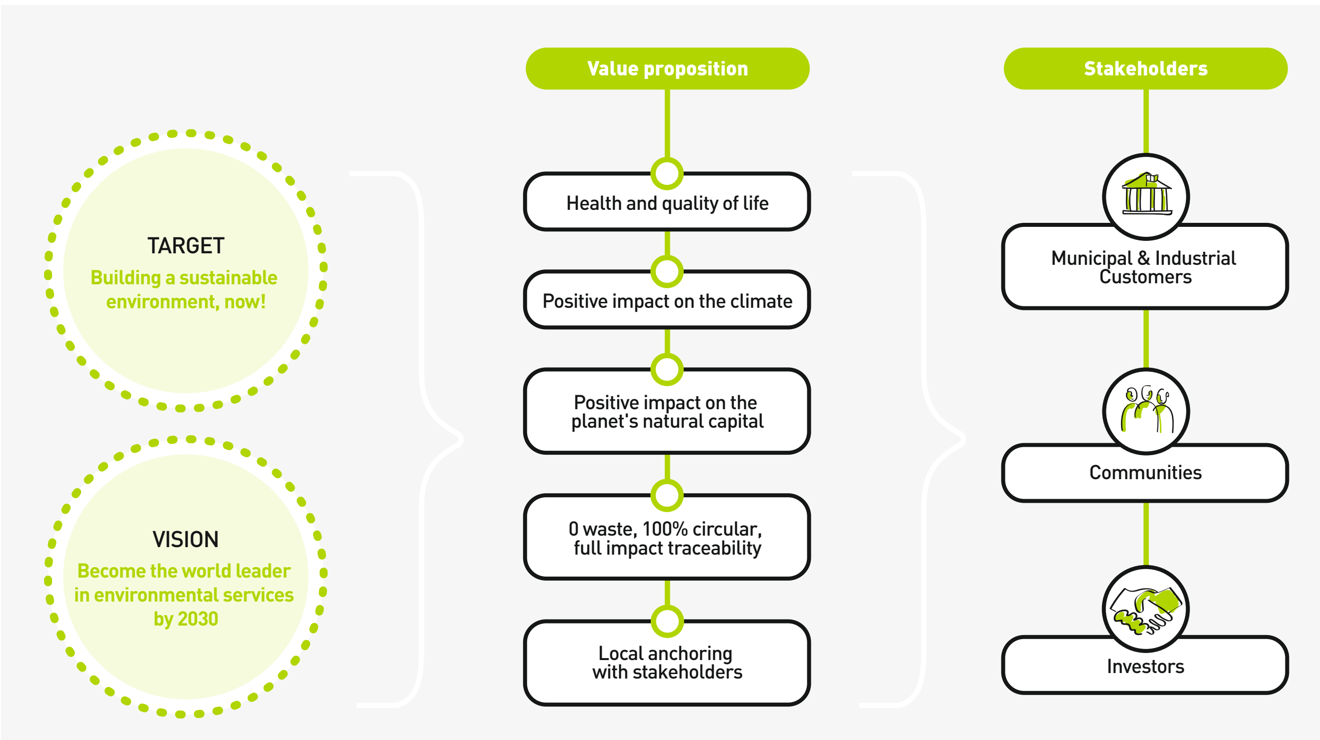
For this, 75 global trends which could impact its markets have been identified and analyzed. Eight of these trends have been ranked by order of priority.



The Group's strategy aims to offer innovative and effective solutions to help its customers to become more competitive and, more generally, to make the difference.

SUEZ intends to stand out as the preferred choice of its industrial and local authority customers as well as of citizens to jointly tackle the greatest challenges facing the planet, namely: the climate crisis, protection and restoration of our natural assets, health and quality of life. The Group aims to offer its customers a portfolio of high added-value solutions that are 100% sustainable and that will make a difference through their positive impact on health, quality of life, the environment and the climate.

SUEZ's unique and differentiating value proposition is focused on health and quality of life, and on a circular and sustainable economy that reduces the carbon footprint of customers, while simultaneously conserving and restoring the natural assets of the planet.



For its customers, the new SUEZ value proposition aims to:

- help industrial customers to comply with their commitments in terms of sustainable development and to control their environmental risks, with performance-focused integrated offers, while sustainably securing their industrial processes;
- help cities and local authorities achieve their environmental transition, thanks to smart and digital solutions;
- provide easier access to sustainable consumption for citizens, by offering affordable solutions.

This strategic plan can build on the confidence already expressed by SUEZ's financial partners in terms of its leadership position in sustainable growth, reflected in the Group's presence in the most prestigious non-financial rating indices (see section 5.9.6).

It also enhances the scope of its commitments as part of the sustainability Roadmap: in October 2019, the Group decided to strengthen its climate commitments to comply with the +1.5°C trajectory:

- reduction of greenhouse gas emissions by 45% (compared to 30% previously), in line with the +1.5°C trajectory and carbon-neutral by 2050 target;
- offer solutions that are 100% sustainable;
- approximately 20 million metric tons of CO_2 emissions avoided each year for its customers.

5.4.2 Levers for transformation

Thanks to its strengths (technology, innovation, know-how, talented staff and an excellent reputation), the Group will grow more selectively, with simplified operational processes and a renewed commitment of its teams, based on their passion for the environment.

The "Shaping SUEZ 2030" plan is based on three strategic pillars that will drive the creation of value for all stakeholders, as of 2021.

5.4.2.1 Selective growth

By targeting selective growth, the Group intends to take advantage of its high potential to innovate in Europe and, across all of its sectors of activity, to speed up development in the areas where the most promising opportunities have been identified:

- International markets: the Group intends to develop its activities in a selected range of countries, where its global value proposition will be implemented, and to increase its investments in innovative services. The Group also aims to grow in markets where the need for environmental infrastructures is rising sharply.
  - Ambition: generate 60% of revenues on international markets;
- industrial customers: the Group wants to speed up its growth in five key and high-growth markets (food, energy, oil & gas, chemicals & pharmaceuticals, and microelectronics), with a priority focused on high added-value activities that take advantage of a diverse portfolio of solutions. Through partnerships with industrial customers, SUEZ is able to offer personalized and integrated solutions that will help them to follow their sustainable development roadmaps.
  - Ambition: generate 50% of revenues with industrial customers;
- data-driven technologies and solutions: the Group relies on proprietary technologies and innovation to develop and roll out advanced solutions on a worldwide scale. SUEZ will also roll out new activities with a high potential, such as the management of air quality and smart agriculture.
  - Ambition: generate 30% of revenues in data-driven technologies and solutions.

5.4.2.2 Organization and performance

SUEZ intends to build a decentralized and agile organization, close to its customers. This new organization will consist of:

- Simplification and optimization of industrial processes that will improve operational performance and significantly increase investments in innovation.
  - Ambition: increase by 50% investments in R&D, innovation and digital technology by 2023;
  - make a total of EUR 1 billion in savings by 2023, of which 35-45% will contribute to improving the profitability of SUEZ; 45-50% of these annual savings would be achieved in 2021.
- a simpler and more efficient organization, with a reduced number of Business Units and a decentralized decision-making process that better meets the needs of customers. Three centers of excellence (Marketing, know-how and Performance, Digital and Innovation) will support the BUs with greater responsibility and in proximity with customers. As of January 1, 2020, the operational BUs are divided into six major regions (France, Northern Europe, Southern Europe and Latin America, North America, Middle East Africa and Central Asia, Asia Pacific) and two global Business Units (Water Technologies & Solutions, Smart & Environmental Solutions).

5.4.2.3 Culture and HR

The success of the Shaping SUEZ 2030 plan is based on the mobilization of energy and the expertise of employees, thus enabling them to meet the needs of customers and SUEZ partners.

The Group's new values – passion for the environment, customer care, respect and team spirit – combined with a culture that reconnects with its conquering spirit, will support the major transformations targeted by its strategic plan.

PASSION FOR THE ENVIRONMENT

Contribute to preserve and restore the planet's natural capital

In all our actions, help reduce, re-use, recycle, recover water and resources, and aim to have a positive impact on climate

CUSTOMER FIRST

Be accountable for clients and make things happen

Be open-minded and innovative

Use the organisation's agility to be competitive

Develop a partnership culture to provide the best solutions for our clients

RESPECT

Care for the safety and well-being of everyone

Act ethically and with integrity

Respect the diversity of other people's skills, personalities and background

Care for the social impact of our actions and act to reduce inequality

TEAM SPIRIT

Collaborate at every level to team work

Trust others and learn from them

Share information and promote open communication

To offer the best level of expertise to the Group's customers, the SUEZ Human Resources policy will strive to further promote the talent, leadership and skills of employees throughout the entire Group.

The SUEZ Group will also establish Centers of Excellence on emerging markets, offering a diverse range of capacities to address the specific issues of its customers.

5.4.3 Research and Innovation

The objective of the ambitious Research and Innovation (R&I) policy practiced by SUEZ is to create differentiated and high value-added offers to enable its customers to more efficiently manage their resources and to encourage the roll-out of a circular economy, to limit its impact on the climate and the environment, and to ensure the health of both humans and the planet. As a real driver of the Group's transformation, innovation is a core component of its strategy. This entails concrete actions and commitments: investing in people and tools and digitally transforming the Group's business lines by introducing greater cross-functionality and adopting a mindset resolutely focused on the future and the customer experience.

In 2019, innovation was the source of many successes. A number of contributing factors lie behind the transformation of the Group, especially digital innovation. This digital transformation is specifically based on developing data science skills, training and the SUEZ Digital Hub (see below).

In 2019, the Group invested EUR 118.5 million in Research and Development, innovation, top-level technical assistance and the management of knowledge. Beyond the conquest of new markets, this investment enhances operational performance through the integration of innovative process and technologies into the businesses, by ensuring their circulation and sharing thanks to a network of global experts. The implementation of these actions is based on the various programs and projects carried out at R&D sites and in the BUs. It also relies on sharing all the Group's innovations and on collaborative innovation with start-ups, suppliers, industrial and academic partners, etc.

As part of the SUEZ 2030 Shaping plan, the objective is to increase by 50% our investments in R&D, innovation and digital by 2023.

5.4.3.1 The innovation ecosystem

To innovate, SUEZ relies on the talents of around 650 researchers and experts from around the world. Their roles range from technical assistance for the operational teams, to implementing applied research programs that pave the way for our future activities, expertise and technologies. The Group's main centers of expertise and research are located in France (Le Pecq-Croissy and Bordeaux), Spain (Barcelona), Belgium (Haasrode), the United States (Houston, Trevose), China (Shanghai), India (Bangalore), Hungary (Oroszlany) and Singapore.

At the Group level, the Research, Innovation and Digital Transformation Department has consolidated the global Innovation – Digital – Performance – Intrapreneurship system, which was set up in 2018, to strengthen the Group's capacity to innovate. It involves:

- clear technology priorities for the Group;
- a shared vision of the Group with the Innovation, Marketing and Performance departments, to guarantee that resources line up with priorities;
- a unique Innovation process for the entire Group, with a shared digital platform, INNOV@SUEZ, to guarantee access to all innovation projects.

At SUEZ, far beyond large research programs, innovation is a state of mind shared by all. A number of tools and procedures are deployed by the Group to strengthen the dynamic of innovation and to encourage the expression of ideas by employees. As a result, the BUs organize an increasing number of innovation challenges and innovation hackathons both globally and locally (France, China, Morocco, India, North America, Australia, etc.). These challenges are now hosted by the INNOV@SUEZ collaborative platform.

5.4.3.2 Open Innovation

SUEZ has set up a structured Open Innovation policy to benefit from external innovation capabilities. To this end, partnerships are formed and consist of stimulating collaborations around innovative projects in technical, digital, commercial and social fields. These partnerships allow the Group to increase its research and development efforts while benefiting from collaborative work with research teams, start-ups, suppliers, industrial companies, etc. They take various shapes (including technological tests, direct investments or investments *via* funds dedicated to start-ups, research partnerships, etc.) to adapt to the maturity of technologies and to the size of the structures with which SUEZ works. Thanks to these collaborative projects, the Group has access to knowledge and technologies that complement its internal expertise and accelerate the time-to-market of innovative products and solutions.

5.4.3.3 An international network of partners

SUEZ maintains long-term privileged relationships with numerous high-level scientific and technical players:

- academics at the University of Bordeaux, IRSTEA, CNRS (France), the Universitat Politecnica de Catalunya (Spain), the University of Tsinghua (Beijing), the Harbin Institute of Technology (China), the Universidad Tecnica Federico Santa Maria (Chile), NUS (Singapore), Rice University (USA), the University of Toronto (Canada) and the University of Darmstadt (Germany);
- with French innovation and skills networks, such as competitiveness clusters in line with our business activities: in Bordeaux, la Maison de l'Eau, an educational area and resource center created and managed by SUEZ, reorganized its locations to house an incubator – La Source – in addition to its normal training activities;
- European bodies (Water Supply and Sanitation Technology Platform, KIC climate, EIT Raw Materials, etc.).

In 2019, SUEZ submitted 33 European projects as part of the Horizon 2020 program, of which 10 were selected.

5.4.3.4 SUEZ Ventures

Created in 2010, SUEZ Ventures is the Group's investment fund. A leading player in corporate venture capital in the water, waste recycling and recovery, and urban services businesses, SUEZ Ventures invests in and forms industrial partnerships with young and innovative tech start-ups. This investment fund, which invests several millions of euros per year, rounds out the Group's array of Open Innovation tools by helping operating entities access innovative solutions for the various businesses.

SUEZ Ventures spots several hundreds of innovative start-ups each year and has made fifteen investments in high-growth potential SMEs that have synergies with the Group. In 2019, SUEZ Ventures invested in the French start-up HESUS, a specialist in construction waste, as well as in the British start-up Inflowmatix, a world leader in high-frequency pressure data management and analysis technology for water operators whose know-how will complement SUEZ's offer in the area of management of drinking water distribution networks.

5.4.3.5 Innovation technological tests (ITF)

The "Industrialization Technology Fund" is an additional measure that tests, in industrial conditions, innovative solutions provided by our partners, whether they are start-ups, large groups, or small and medium-sized companies.

This procedure has the advantage of accelerating time-to-market for new technological solutions that meet the needs of our customers and encouraging partnership-type collaborations.

Among the tests carried out in 2019, several promising technological innovations were validated, particularly in the areas of distribution and collection network management as well as in the area of waste management.

The Group also innovates in partnership with its suppliers, to ensure that the solutions they offer are best suited to its needs.

5.4.3.6 Challenges

In 2019, SUEZ continued to roll out its program of challenges involving start-ups, customers and students for the purpose of further expanding the area of Open Innovation. In Lille, at the end of August, EDHEC Business School organized a hackathon on the theme of the circular economy with the active participation of SUEZ. A few days later, in conjunction with Decoset, CEA Tech Occitanie, SUEZ organized another hackathon to devise a waste-collection site of the future, specifically tailored to needs of citizens. In Bangalore (India), the local SUEZ and NUMA teams organized the first "DataCity" challenge event in Asia.

5.4.4 Outlook

As part of the new "Shaping SUEZ 2030" strategic plan announced to the public on October 2, 2019, SUEZ has announced that, for the next four years until 2023, the Group's ambition is to embed its new culture in the Group, pave the way for steady organic growth with lower capital intensity, transform its business portfolio and improve its return on capital employed by at least two points, enhancing its ability to increase its dividend payout ratio.

As announced during the investors meeting on October 2, 2019, the Group will use new performance indicators from 2020 onward: recurring EPS (earnings per share) and recurring free cash flow. These indicators do not include items that arise over a limited period of time, to reflect income and cash flow attributable to shareholders over the long term.

The results of these changes would incidentally be visible from 2021, and the financial targets the Group set for this date[1] reflect how attentive the Group is to profitability and long-term performance.

- recurring earnings per share (EPS) of EUR 0.8[2] (new definition);
- recurring free cash flow (FCF) (new definition) of EUR 500 million[3].

As part of a financial leverage net debt/EBITDA of 2.8 to 3 times.

SUEZ announced the following forecasts for 2020[1] when it published its results for fiscal year 2019:

- organic revenue growth of 2% to 3%;
- organic EBIT growth of +5% to 6%, excluding the impact of Covid-19 in China, which is estimated at between EUR 30 million to EUR 40 million over a three-month period, assuming the situation will gradually return to normal during the second quarter of 2020;
- recurring earnings per share (EPS) of EUR 0.65[2] (new definition);
- recurring free cash flow (FCF) (new definition) of EUR 300 million[3].

The Covid-19 epidemic has spread since these forecasts were announced. On March 11, 2020, the World Health Organization labeled Covid-19 a pandemic. It is now affecting other regions in the world, while it only affected China initially.

As a result, as of the date of this Universal Registration Document, the impacts on the Group's business activities are as follows:

- in China, impacts of Covid-19 epidemic announced on February 26 related to the hazardous waste incineration business activities as well as to water volumes in Macau. Considering the Group is continuing to record a gradual return to business activities, SUEZ confirms that the impacts specified on February 26 are still valid: EUR 30 to 40 million on EBIT for 2020, mainly over the first quarter, with a gradual return to normal planned for the second quarter, for now;
- in Europe and the Americas, even though governments started acting very recently, the Group is starting to see initial impacts on things like raw material prices and volumes. These impacts are not uniform. Business activity is still normal in some pockets around the world, in some industrial sectors and for certain customers;
- so although it is too early to quantify the impact this will have on 2020 targets, which are currently suspended, and to create new targets, it is clear that like all industries, SUEZ is likely to be significantly impacted in 2020 due to the consequences of quarantine measures around the world. SUEZ is monitoring the situation closely and will inform the market in good time as the situation unfolds.

Against this backdrop, SUEZ has already started adapting to this environment. The Group's transformation plan – Shaping SUEZ 2030 – is delivering a major improvement in performance and profitability as well as more selective investments, and it is already well underway throughout the entire Group.

With regard to the public health crisis, in 2020, SUEZ had already adopted additional measures to optimize business activities and mitigate potential impacts on earnings and profitability as well as increase the Group's liquidity while providing the best service to its customers:

- take strong short-term measures to significantly reduce expenses and costs beyond what was initially forecast;
- reduce investments in 2020 by around 15% compared to 2019 levels while being mindful that investments are needed in certain business activities to guarantee service levels.

(1) Assuming no major changes in economic or market conditions (including interest rates, foreign exchange rates and raw material prices) compared to conditions observed over the past 12 months.
(2) (Net income Group share – (hybrid coupon + total one-off cash and non-cash expenses + capital gains or losses on disposals) x (1 – applicable tax rate))/number of shares.
(3) Cash flows from operating activities – hybrid coupon + restructuring costs (cash) – tangible and intangible investments – leases – net financial expenses – cash flow including dividends to/from non-controlling interests.

5.5 Significant events in the development of the issuer's business activities

5.5.1 Launch of the Shaping SUEZ 2030 project

The change in governance decided at the Shareholders' Meeting held on May 14, 2019 was reflected in the announcement in the fall of a new strategic plan, Shaping SUEZ 2030, which sets out the Group's ambitions for the decade. This plan is detailed in chapter 5.4 of this Universal Registration Document.

5.5.2 Outstanding achievements in terms of innovation

A number of important innovation events occurred during the course of 2019:

- launched in 2018, the SUEZ Digital Hub aims to accelerate every six months around fifteen digital innovation projects conducted both internally and in partnership with external companies. In 2019, it reached its cruising speed: the first two seasons were successfully completed and a third was launched in the fall;
- the PRAIRIE Institute was selected in April 2019 and officially launched in October, following a call for creative projects from the Interdisciplinary Institute in Artificial Intelligence (3IA) as part of the French Artificial Intelligence strategy launched by the President of the French Republic. The goal of this institute, in which Amazon, Deepmind, ENGIE, Facebook, Faurecia, GE Healthcare, Google, IDEMIA, Microsoft, NAVEr LABS, Nokia Bell Labs, Pfizer, PSA Group, SUEZ, Uber and Valeo participate, is to become a center of excellence for artificial intelligence in Paris. Its objectives are: to develop basic and applied research, to take part in training in the field of AI and to exert a significant social and economic impact. As a founding member, SUEZ will research, alongside academic and industrial partners, artificial intelligence tailored to the challenges of the water, waste and environment sectors;
- the BRGM (French Geological and Mining Research Office) and SUEZ signed a framework partnership agreement on June 27, 2019. For a period of three years, the aim of this agreement is to strengthen the Group's scientific and industrial cooperation with BRGM in the water and environment sectors.

5.6 Competitive position

The Group faces competition from a number of other operators, including:

- public operators that may decide to retain or resume management of their infrastructures after analyzing and comparing the services offered by private operators; they may also offer proposals for markets in other regions or cities;
- large private operators, already well-established in their domestic markets and seeking to expand their activities or services and use their expertise in areas that show strong potential;
- local operators that are adopting aggressive strategies when participating in bidding processes;
- financial players (private equity and infrastructure funds) that are investing in markets through asset and company acquisitions;
- companies involved in related industrial sectors and seeking to expand their offerings to environmental management services, particularly building and public works companies in the waste sector and equipment suppliers in the water sector, by positioning themselves in the "BOT" (Build, Operate, and Transfer) contracts segment, where they can apply their construction expertise, as well as their ability to manage and operate those assets.

Most of these players, however, are not active in a range of segments as broad as the Group, whether in terms of services, technical skills or geographical locations, even though through grouping or diversification strategies, these competing companies are working to expand the scope of their activities to meet customers' expectations. Through its presence in all water and waste cycles, to which it exclusively dedicates itself, the Group believes it holds leading positions across all its business activities.

5.6.1 Competition in the water sector

In terms of revenues, the Group ranks second in the global market for environmental water-related services, behind Veolia. Other companies active in this market have more local operations and lower revenues. In a market driven by increasing urbanization, the development of emerging countries and the strengthening of health regulations, the competition between public and foreign groups is intensifying.

In France, Veolia and Saur are the Group's main private competitors. Against the *régies* (local publicly controlled entities), which are also a potential public competitor, the balance is positive overall, in favor of private operators.

In Spain, the Group remains the leader in terms of revenues and the size of the population it serves. Aqualia maintains its No. 2 position. In the rest of Europe, there has not been any notable change overall in the positions of the various private, public or mixed operators. The Group continues to actively monitor the market.

In the United States, American Water Works is the largest company, operating in the US with three lines of business: 1) it is the largest operator on the regulated water market held by private investors; 2) it is the largest operator of federal military bases; 3) it is the largest provider of service to homeowners such as specialized water and energy insurance. Aqua America also pursues a dynamic acquisition strategy in the regulated water market. In the regulated water market, two competitors are emerging: Eversource and NW Natural. In 2018, the non-regulated market evolved slowly.

In Latin America, the water market is fragmented, mainly as a result of the diverse nature of regulatory frameworks and the level of maturity of individual countries. Spanish private companies are very active here, especially Acciona, FCC and Aqualia, along with the French Group Veolia and, to a lesser extent, Brazilian players. The last few years have also seen Japanese competitors vying to increase their market share.

Asia is also an emerging market where demand for drinking water production and wastewater infrastructure is strong. Foreign investors such as Hyflux have shown a growing interest in the Chinese market. Some of these investors are also looking to enter this market by forming joint ventures with local players. In addition, the growing domestic demand for investment in water treatment solutions is also generating competition from pension funds, insurance companies and infrastructure funds. Local Chinese companies continue to grow strongly through new projects in China, as well as by following an international expansion policy with acquisitions elsewhere in Asia, Europe and Australia.

In the Middle East, there is a firming up of the competitive environment with a strong presence of regional groups in the sector like Metito, in addition to Spanish, French and Indian groups like Larsen & Toubro or VA Tech Wabag.

In Africa, the Group is in competition with French water treatment operators like Veolia, Vinci Environnement and Eiffage, as well as Spanish companies such as Acciona, FCC, Aqualia and others.

In India, the competitors are the major historical water treatment players ION Exchange, VA Tech and others. Engineering firms such as Larsen & Toubro and SPML have recently targeted this market.

In Australia, the water market remains extremely competitive: SUEZ dominates the O&M municipal market, followed by Veolia, Trility, Valoriza and Acciona who all offer both DB and O&M solutions. Local competition is strong, especially in the DB market.

SUEZ Water Technologies & Solutions competes with Nalco (Ecolab Group), Veolia, Evoqua, Solenis and several other global and regional players that provide water-related technologies and services. Depending on the geographic region, SWTS may be in competition with local or regional operators as well as with other types of players: producers of chemicals and specialty chemicals, manufacturers of water filtration equipment, producers of water quality equipment, industrial service providers, water treatment companies and EPC (Engineering, Procurement and Construction) companies. SWTS faces fierce and robust competition in all its activities worldwide. Competitive pressure and the constant need to advance the technologies available requires a sustained investment in research and development. Each target market has a different structure depending on the communities and customers served but also according to the applicable legislation in each country. Competitors' technology portfolios vary between regions depending on the target customers and the profitability of technologies by region.

5.6.2 Competition in the waste sector

The Group ranks fourth in terms of revenues in the global market for waste-related environmental services, behind Waste Management, Republic Services and Veolia. Except for Veolia, most of the Group's competitors in the waste sector are national players and/or do not provide all the services offered by the Group. In Europe, the Group's main competitors are Veolia, Remondis, FCC, Renewi and Urbaser.

The market for solid recovered fuel (SRF) is also growing strongly. These are alternative combustible products that come primarily from waste residue that is treated to certain specifications. SRF is used as a replacement for fossil fuels by cement manufacturers or in general by industries with high fuel consumption levels.

In France, the competition is still very active, but with no substantial change in positions or significant consolidation movements. In the United Kingdom, SUEZ R&R UK is well placed on the market. The market is continuing its transformation with stable recycling volumes and increased energy recovery from waste. The number of landfill sites continues to decline, leading to issues related to residual waste in some areas. The landfill ban coming into force in Scotland at the end of 2020 is likely to lead to further stress on English landfill and EFW capacity and RDF exports.

In Belgium, the Group estimates that it is one of the market leaders with solid positions in the area of collection and treatment, particularly for industrial customers.

In Germany, the Group's presence is concentrated in the west and south, particularly in terms of collection activities. The Group considers that it is ranked in fourth position on this market.

In the Netherlands, the Group operates across the entire value chain and estimates that it is the second largest operator on this market.

In Australia, the waste market remains highly competitive, with regulatory disparities between the states resulting in cost differences for waste treatment and recovery. The Australian recycling market suffered greatly as a result of China's ban on waste imports known as "National Sword", as Australia exports more than 50% of its plastics to China. Interstate waste transportation to the state of Queensland continues to be a critical issue, although this is expected to change as a new waste disposal levy was introduced in Queensland in July 2019. SUEZ has progressed in exploring large scale energy from waste projects and continues to be proactive in looking for projects to develop in both the municipal and industrial sectors.

In Asia, particularly in China, the waste segment is undergoing robust growth and competition has intensified. The authorities are encouraging sustainable solutions to address the challenges related to waste treatment and are launching public tenders for projects focused on energy recovery from household and organic waste. The main competitors are public companies and companies supported by the government, such as China Everbright International, CECEP, Shanghai Environmental and Chongqing Sanfeng, which are active at national or provincial levels. The Chinese authorities are taking significant action to reduce existing pollution problems: the first aim of this is to improve standards to a level similar to that of Europe; the second, equally important, will be to ensure the application of these standards. The result of these measures is an increase in the volumes of waste treated at the appropriate sites.

In Latin America, international competitors who are well established in the main countries are applying an aggressive external growth strategy, especially in the hazardous waste segment.

5.7 Dependence factors with regards to patents, licenses, contracts and manufacturing methods

5.7.1 Patents and trademarks

The assets developed by SUEZ to offer its customers new products and services with high added value contribute significantly to value creation. That is why the Group is particularly attentive to the development, recovery, and especially the protection of its assets. Whether with regard to trademarks or patents, SUEZ employs a deliberate policy to protect intellectual property.

SUEZ's intellectual property strategy aims to gain a decisive competitive edge for the Group's Business Units through its portfolio of proprietary technologies and to protect them from litigation risk, but also to make the Group more attractive to technological and commercial partners and to create a portfolio of valuable intangible assets.

Since 2015, the Group has centralized its intellectual property strategy and had it supervised by an *ad hoc* department comprising qualified patent engineers. This department ensures the roll-out of intellectual property processes throughout the Group, which are managed *via* a database that includes all the Group's patents.

SUEZ's intellectual property structure integrated the WTS team in 2018 and now has several European patent attorneys and US patent attorneys.

5.7.1.1 Patents

At December 31, 2019, SUEZ's intellectual property portfolio included 4,230 active patents divided into 861 families. These patents are grouped into four cross-entity business portfolios: Water for Municipal Use and Treatment Infrastructures, Industrial Solutions, Recycling and Recovery, Digital and Emerging Business.

In 2019, SUEZ filed 57 new patent applications, including 31 in industrial activities and 8 in digital solutions. The strategic areas protected include, for example, a new version of the Densadeg settling tank, a digital solution for predictive maintenance of Netscan water distribution networks, a method for pre-treating sludge from boring machines, as well as various industrial water-conditioning products.

5.7.1.2 Trademarks

Regarding institutional trademarks held by SUEZ and its subsidiaries, in 2019 the Group pursued the implementation of its unique trademark.

The "SUEZ" trademark was filed in France in March 2005 and was registered internationally in August 2005.

Apart from the "institutional" trademarks, at the end of 2019, SUEZ was at the head of a portfolio of around 2,180 "product" trademarks in effect. These trademarks protect product names such as "AQUADVANCED" and "Densadeg", as well as the names of services and technological platforms. In 2019, SUEZ registered the Fireslam trademark, which refers to a range of flame-retardant products, and Airadvanced, which refers to all air-quality related offers.

5.7.2 Other dependence factors

Information on dependence factors can be found in chapter 3 of this document.

5.8 Investments

5.8.1 Main investments made by SUEZ over the past two years

A description of the principal investments made by the Group over the course of 2018-2019 is provided in section 7.3.1, "Cash flows from investing activities", of this Universal Registration Document.

5.8.2 Main investments of the Company in progress

None.

5.8.3 Main investments planned or subject to firm commitments from the management bodies

None.

5.9 Non-Financial Performance Statement – Group environmental, corporate and social responsibility policy

A modified regulatory framework based on the significance of non-financial information

Since the 2001 NRE (New Economic Regulations) law, French listed companies must report on their environmental and social impact in their Management Report. The Grenelle II Law (Article 225) reinforced these obligations by specifying the type of information that companies must report in three areas:

- environmental information;
- social information;
- corporate social commitments to promote sustainable development.

Furthermore, the decree dated August 19, 2016 pursuant to the Law of August 17, 2015 on Energy Transition for Green Growth added the following information, inter alia, from 2016:

- measures for prevention, recycling, reuse, other ways of recovery and elimination of waste;
- actions for fighting against food waste and the significant greenhouse gas emissions items caused by the activities of the Company, especially through the use of goods and services it produces.

With Ordinance 2017-1280 of July 19, 2017 and Decree 2017–1265 of August 9, 2017 amending Articles R. 225–104 through R. 225–105–2 of the French Commercial Code, France has translated European Directive 2014/95/EU relating to the publication of non-financial information, which requires French listed companies to publish and declare non-financial information for fiscal years starting on or after September 1, 2017. This translation was completed in November 2018 by amending Article L. 225-102-1 of the French Commercial Code.

This new system, which replaces the system put in place by the Grenelle II Law, prioritizes "significance" and the gathering of more relevant and useful information for the companies and their stakeholders by emphasizing relevant social, environmental and societal information (and for listed companies, information on anti-corruption and respecting human rights) in terms of the main risks and challenges identified by the Company. It also enables the Company to include legal requirements regarding the "duty of vigilance" law and the Sapin 2 law in their non-financial reporting while still reporting on requirements related to the Energy Transition for Green Growth Law.

5.9.1 Group business model

With total revenues in excess of EUR 18 billion and more than 89,000 employees at December 31, 2019, the Group is one of the two main global environmental players and the only international player exclusively dedicated to water and waste activities working to serve local authorities and industrial customers. Its business model falls steadfastly within the principles of the circular economy. The Group operates throughout the entire resource value chain, from designing, building and operating facilities for water or collection, sorting and recovery of waste to supplying integrated solutions for the circular economy and environmental services.

One of the Group's principal strengths lies in the diversity of its markets and the balance of its customer portfolio, businesses and geographical exposure.

Lastly, the equilibrium in the Group's business model is also due to the variety of its exposure: service contracts, equipment and chemical supply, short-, medium- or long-term O&M contracts, exposure to local authorities or industrial customers as well as to regulated/non-regulated markets, and finally investment, construction and operation of proprietary assets.

The value created by the Group for its stakeholders provides significant benefits that, due to its business activities, predominately favor local economic players: more than 90% of economic flows generated by the Group's activity are redistributed to its employees, subcontractors and suppliers, as well as to the states and regional municipal customers, NGOs and local communities.

Faced with a rapidly changing environmental market regarding both demographic and climate changes, new expectations from these customers in terms of overall performance and societal demands as citizens and companies alike grow more assertive, the Shaping SUEZ 2030 strategic plan, presented by the Group on October 2, 2019, aims to make the Group the world leader in environmental services by 2030. In particular, it is accelerating the transformation of the Group business model moving:

- from volume-based economic models to new models based on operating performance, reliability of processes and sustainable solutions;
- from offerings based on infrastructure construction and operation to offerings with high technological added value, particularly digital-based;
- from contractual models in which the Group provides significant infrastructure financing to arrangements that include a wider variety of financial partners.

This will also involve a change in the Group's solutions portfolio, moving towards "100% sustainable" solutions that will stand out for their positive impact on the environment (air/water/soil), climate, and – more generally – health and quality of life.

The value creation chain related to the Group's business activities is presented in chapter 5 "Overview of activities", its markets and competitive positioning in chapters 5.3 "Main markets" and 5.6 "Competitive position", and its strategy and growth outlook for its various markets in chapter 5.4 "Strategy".

SUEZ's position as leader in environmental activities as well as its ambition for growth and for transforming its business activities against a backdrop of both growing needs in new environmental services and a shaky macroeconomic environment led the Group to apply an integrated management approach for identifying its main risks (chapter 3.1) and its opportunities (chapters 5.2 to 5.4). This management approach is described in the action plans applied within different levels of the Group.

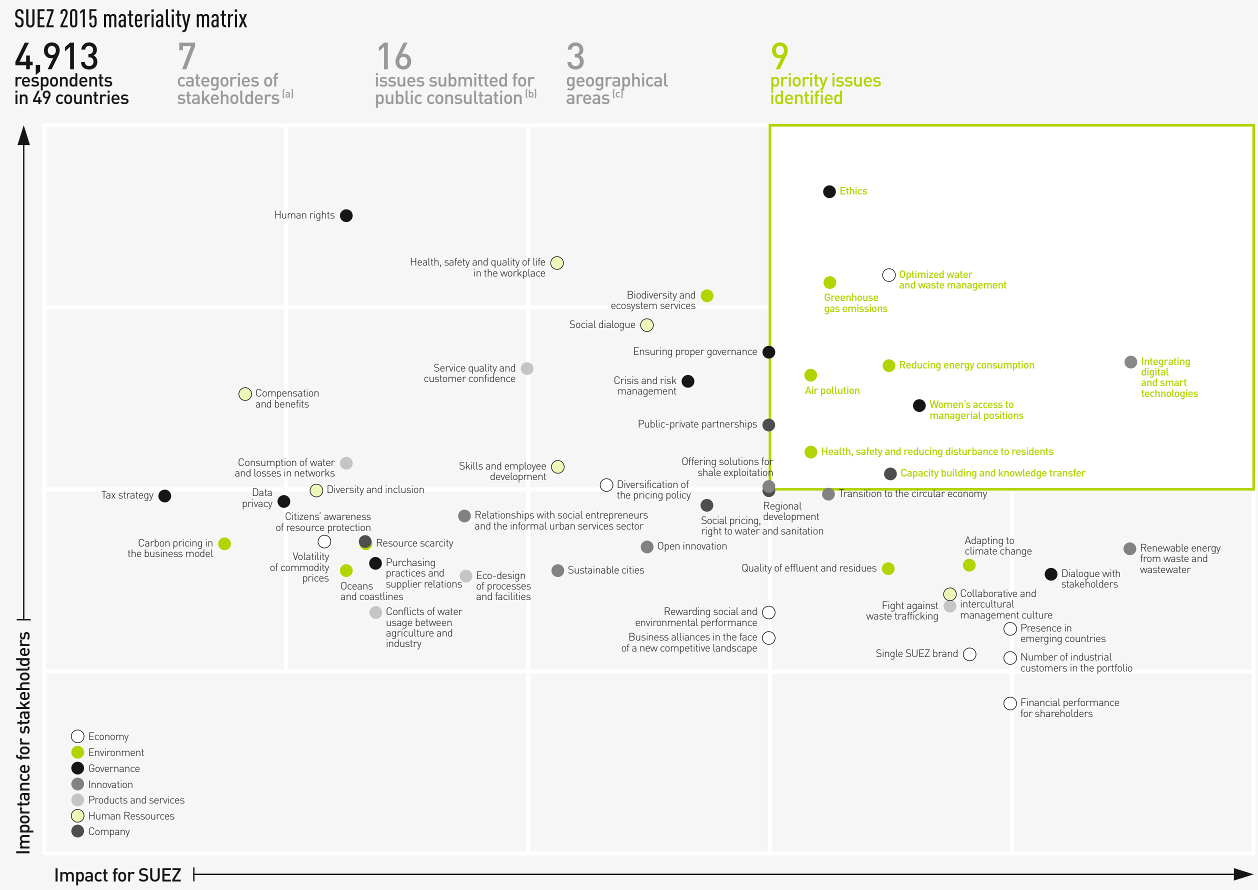
5.9.2 Main non-financial challenges related to the Group's business activities

To build its Sustainable Development Roadmap for 2021, SUEZ conducted a large consultation in 2015 with internal and external stakeholders to complete a materiality study with nearly 5,000 people in 49 countries. In line with the integrated risk management system (chapter 3.2), this study prioritized the Group's non-financial risks, and particularly:

- four priority macro-challenges: be a collaborative, open and responsible company; be the leader in the low-carbon and circular economy; support customers' environmental transition with concrete solutions; contribute to the common good;
- 17 key commitments to assist in these macro-challenges.

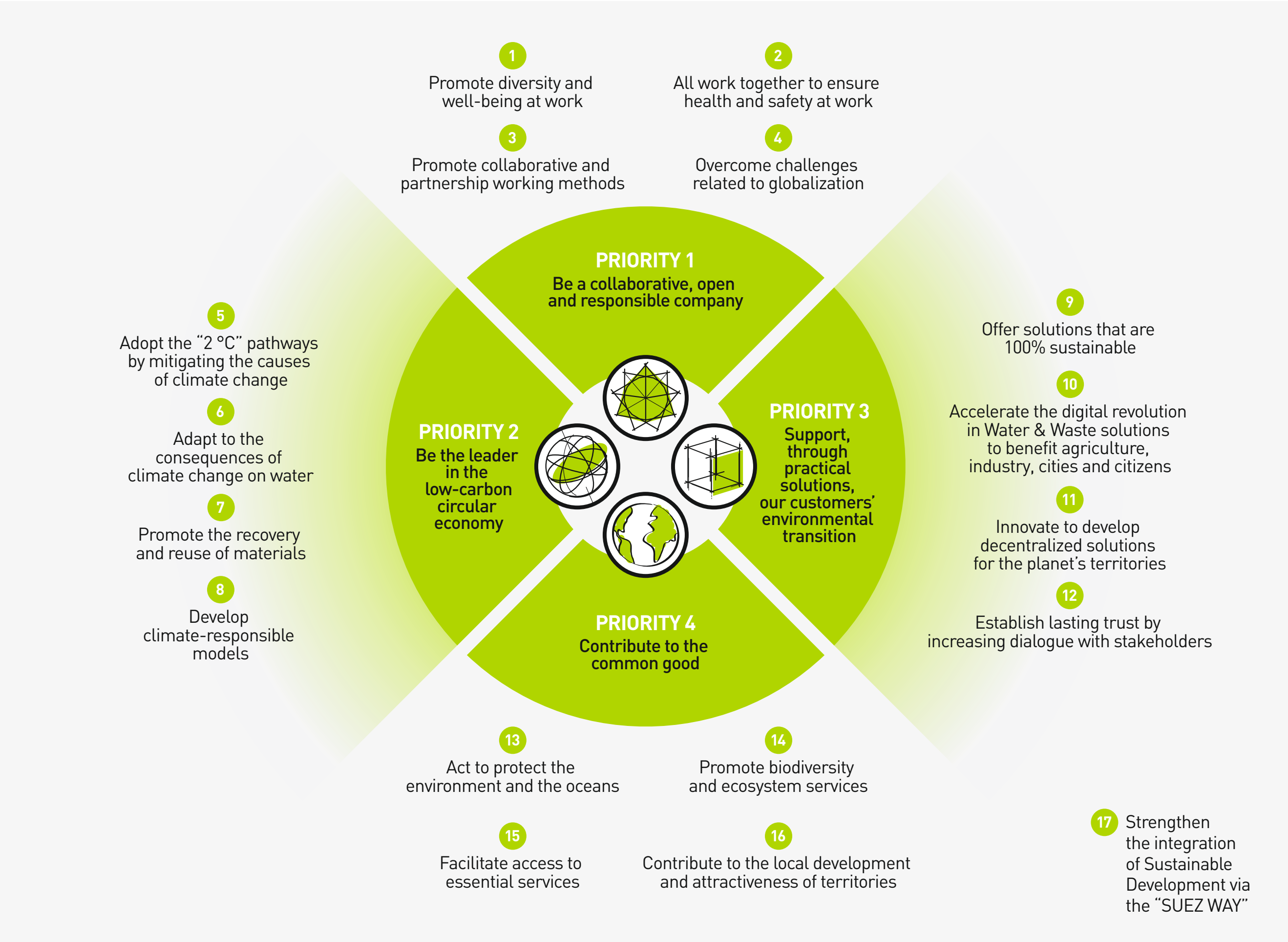
These commitments constitute the backbone of the 2017-2021 Sustainable Development Roadmap. Replacing the commitments from 2008-2012 and 2012-2016, this Roadmap fulfills two functions:

- to act as a lever for the Group's transformation and as a tool for management control: the 17 measurable commitments with specific deadlines contain action plans to reach the objectives by 2021;
- to contribute to the Sustainable Development Goals (SDG) as defined by the United Nations in 2015. Representing a common language with its customers and all stakeholders, the UN agenda is a valuable framework for SUEZ in developing and managing its strategy.



(a) Employees, investors and shareholders, public sector, private sector, civil society, research and education, media.
(b) In France, the United Kingdom, Spain and Morocco.
(c) France, rest of Europe and rest of the world.

GRI DISCLOSURE LABELS
G4-19, G4-24, G4-25, G4-27



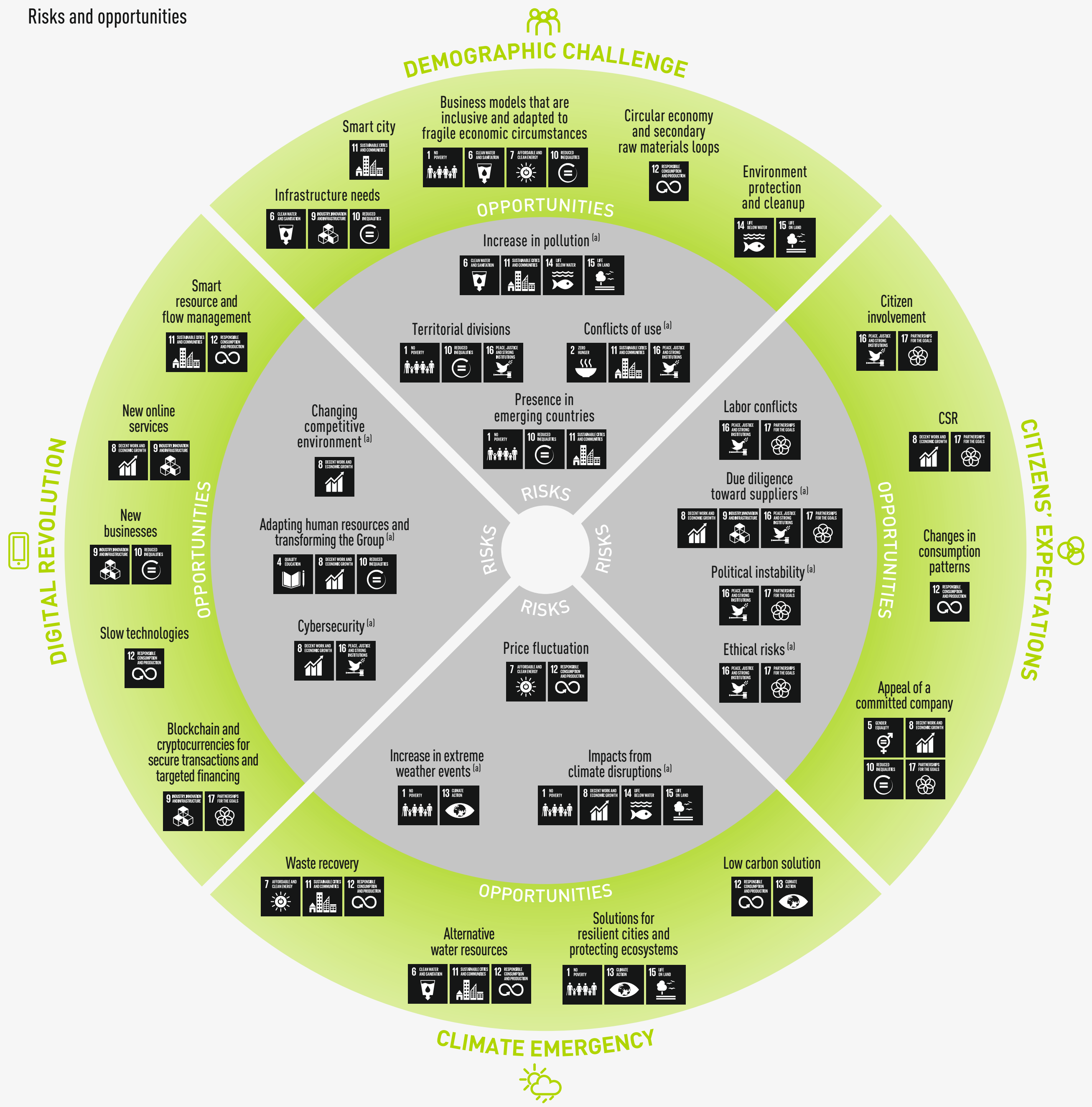
The 2017-2021 Sustainable Development Roadmap was approved by the SUEZ Management Committee in December 2016, reviewed by the Ethics and Sustainable Development Committee meeting held on February 23, 2017, presented in full to the Board of Directors on February 28, 2017, then at the Group Shareholders' Meeting held on May 10, 2017, and finally at the Board of Directors' Strategy Seminar held on November 2 and 3, 2017. The Roadmap is also the subject of an annual discussion with staff representative bodies within the Secretariat of the European Works Council. Rolled out in all the Group's Business Units, it involves all of its business activities around the world.

As with the previous Roadmaps, the commitments contain key results or progress indicators. A report on their progress is published annually in the Group's Integrated Report, verified by an independent third party and presented annually to the Board of Directors' CSR, Innovation, Ethics, Water, and Sustainable Planet Committee.

In order to reach the objectives set for 2021, managing the Roadmap also relies on:

- **Monitoring long-term trends and resultant risks and opportunities:** SUEZ has identified four major modern world challenges that impact its business activities and priority challenges: the demographic challenge, the climate emergency, the digital switchover and changes in citizen demands. Risks and opportunities have been identified and then analyzed for each of these megatrends, and they are managed as part of the Group's main processes, especially with regard to risk management (section 3.2.1), ethics and compliance (section 3.2.4), Human Resources (chapter 15.1) and purchasing (section 5.9.2.2.7). Following the application of the law on the duty of vigilance and the Sapin 2 law, the corporate social responsibility aspect of these processes has been strengthened and is driven by the Sustainable Development Department and its specialists in the subsidiaries (section 5.9.2.2.7).

Risks and opportunities



Risks marked (a) are described in chapter 3.1 of the Universal Registration Document [1].

(1) See section 3.1.3 "Operational risks": Increase in pollution = environmental and industrial risks; Conflicts of use = risks related to continuity of service; Vigilance duty and ethical risks = risks related to delays in implementing regulatory compliance measures; Political instability = reputation and opinion risk; Impact of climate change = risks related to changes in environmental regulations and their implementation; Adaptation of Human Resources and transformation of the Group = risks related to the competitive environment and delays in innovation + recruitment, skills and succession risks; "Risks related to the management of Human Resources" and "Risk related to the transformation of the Group"; Cybersecurity: see section 3.2.3 "Management of IT risks".

- **Updating the significance of the challenges:** in order to guide the progress of the Roadmap as close as possible to societal expectations, SUEZ regularly measures its reputation among the general public and stakeholders, and periodically reviews its materiality analysis. In 2018, SUEZ tested out the importance of its various commitments with both its public and private customers and potential customers, its employees and citizens in its primary markets by surveying nearly 2,000 people. The study shows that citizenship and governance are vital markers of the reputation of SUEZ, which is overall better perceived than the average utility company, according to Reputation Institute's international benchmark. Commitments deemed a priority under the 2017-2021 Roadmap pertain to employee Health and Safety, the circular economy, developing 100% sustainable solutions, protecting the health of the environment and oceans, and adapting to the consequences of climate change on water.
- **Observing dilemmas and controversies:** the monitoring of issues arising in society in the regions where the Group operates is included in the report on the Vigilance Plan (section 5.9.2.2.7). Aware that its reputation is a valuable asset, for more than ten years, SUEZ has maintained a voluntary open dialog policy at all relevant levels in order to drive its overall performance. Convinced that this dialog is crucial in a time of not only environmental transition, but demographic and digital transition as well, SUEZ is spearheading shared standards such as OECD principles for water governance or Committee 21 principles for constructive corporate dialog with stakeholders. SUEZ consults with experts and stakeholders on a yearly basis under the aegis of a third party guarantor to handle dilemmas encountered together. In 2019, this consultation covered management of plastics and the corporate purpose.

A summary of these studies and discussions with stakeholders has led to keeping the following environmental, corporate and social challenges, seen as the most prominent for the Group's Non-Financial Performance Statement:

	Non-Financial Performance Statement sections concerned		
Main challenges identified	Description of the challenge	Associated policies and action plans	Risks presenting a residual risk level described in chapter 3.1 of the Universal Registration Document
1. Management of environmental and industrial risks	► 5.9.2.1.1	► 5.9.2.2.1	► Environmental and industrial risks ► Reputation and opinion risk
2. Optimized water and waste management	► 5.9.2.1.2	► 5.9.2.2.2	
3. Making the water supply safer	► 5.9.2.1.3	► 5.9.2.2.3	► Risks related to service continuity ► Reputation and opinion risk
4. Fighting climate change	► 5.9.2.1.4	► 5.9.2.2.4	► Risks relating to the change in environmental regulations and their implementation
5. Protection of biodiversity and ecosystems	► 5.9.2.1.5	► 5.9.2.2.5	► Risks relating to the change in environmental regulations and their implementation
6. Social and societal contribution of the Group's activity	► 5.9.2.1.6	► 5.9.2.2.6	
7. Promotion of human rights and duty of vigilance	► 5.9.2.1.7	► 5.9.2.2.7	► Risks relating to delays in implementation of regulatory compliance measures ► Reputation and opinion risk ► Risks relating to cybersecurity, data protection, and information system unavailability
8. Protection of Health and Safety for all	► 5.9.2.1.8	► 5.9.2.2.8	► Health, security and safety risks
9. Fighting corruption	► 5.9.2.1.9	► 5.9.2.2.9	► Reputation and opinion risk ► Risks relating to delays in implementation of regulatory compliance measures
10. Maintaining key competencies in the Group's employees	► 5.9.2.1.10	► 5.9.2.2.10	► Risks related to the competitive environment and delays in innovation ► Recruitment, competencies, and succession risks ► Risks related to the Group's transformation and to the performance plan

5.9.2.1 Description of main challenges identified

5.9.2.1.1 MANAGEMENT OF INDUSTRIAL AND ENVIRONMENTAL RISKS

The facilities that the Group owns or manages on behalf of third parties carry **risks to the surrounding environment (air, water, soil, habitat and biodiversity)** and may pose **risks to the health of consumers, local residents, employees, or even subcontractors**. These health and environmental risks, which are governed by strict national and international regulations, are regularly monitored by the Group's teams and by the public authorities. These changing regulations with regard to environmental responsibility and environmental liabilities carry the risk of increasing the Company's vulnerability in relation to its activities. This vulnerability must be assessed for older facilities (such as closed landfills) and for sites in operation. It may also involve damage caused to habitats or species. For a more complete description, see section 3.2.2, paragraph "Management of environmental and industrial risks".

5.9.2.1.2 OPTIMIZED WATER AND WASTE MANAGEMENT

Waste and wastewater management is central to SUEZ's business model. The regulatory framework for these business activities is currently undergoing rapid change in the main countries where the Group operates (see chapter 9 "Legal and regulatory framework"). In Europe, states are gradually adopting regulations for the circular economy aiming to reduce, reuse and recycle waste under the European Commission's Circular Economy Package. In addition, the international recycling market is undergoing serious changes due to the gradual ban on certain types of packaging such as single-use plastic, changing prices in secondary raw materials or China's decision to stop importing waste. These regulatory and geopolitical changes represent an opportunity for SUEZ to leave its traditional waste and wastewater management methods for circular economy solutions such as recycling and materials recovery, in addition to energy and biological matter recovery from all types of waste, with the objectives of creating new resources, producing renewable energy and reducing the greenhouse gas emissions of the Group's customers. These activities contribute to decorrelating economic growth from the consumption of raw materials and thus to generating cascading reductions in greenhouse gas emissions linked to production and consumption patterns.

The Group thus operates several types of facilities, such as:

- voluntary drop-off centers/household waste disposal centers;
- sorting and recycling centers;
- production facilities for Solid Recovered Fuel (SRF);
- disassembly and dismantling facilities: waste from electrical and electronic equipment, end-of-life vehicles, bulky waste, furniture, etc.;
- facilities for reprocessing of specific, pre-sorted recyclable materials: transformation into secondary raw materials.

Biological treatment also represents opportunities for recovery:

- composting platforms: household waste, urban and industrial sludge, green waste, livestock sludge, grease, etc.;
- mechanical and biological treatment.

The circular economy model is more commonly associated with materials, and yet it also aims to optimize and diversify the use of water throughout its life cycle.

Saving water, either at the consumer's home or in the networks, is the first step: smart technologies now make it easier to manage and to better link Environmental and Economic Performance by, for example, measuring and then fitting production and consumption levels to energy tariff bands, for example.

The second step is overhauling wastewater treatment plants: by nature a part of the "extended water cycle", they now participate in the "small cycle" of local circular economy loops. As a result, the West Basin County Station near Los Angeles produces a "hydraulic mix" of several types of water for different uses (industrial water, process water for refineries, municipal uses, agriculture and groundwater recharge).

The third step is changing the wastewater treatment stations into resource-plants capable of reusing 100% of the wastewater treated, but also recovering 100% of the byproducts from the wastewater treatment process: recovering energy from biowaste, transforming sludge into compost and even extracting phosphorus. This step is already underway at SUEZ with its Biofactories (see section 5.9.2.2.2).

5.9.2.1.3 MAKING THE WATER SUPPLY SAFER

Population growth, changing eating habits and the resulting agricultural demand for water, and the inadequacy of cleanup systems have resulted in growing pressure on water resources. In addition, climate change introduced in a growing number of regions implies a risk of increased tensions particularly through the accentuation of drought episodes.

Water is a very unevenly distributed resource that must be protected. Some countries have already experienced water stress situations, which are harder to manage when the country is at a low level of economic development. By 2025, two thirds of the world's population could be living in regions affected by strains in the water supply, particularly the Middle East and certain regions of Africa, Asia and Latin America.

SUEZ works in partnership with the local authorities to restore or install efficient water supply services in the most vulnerable regions. In Cartagena (Colombia), SUEZ works with local authorities to offer a service that ensures water supply for 24 hours per day (compared to 14 hours at the start of the contract). SUEZ has taken the water loss rate from 60% to 31% and is continuing to work to improve performance. In Davangere (India), SUEZ signed in March 2018 a water services improvement contract with the city covering the renewal and operation of the drinking water production plants for the city, the improvement of the performance of the drinking water network and the customer management service. This is a 12-year project that will supply this city of 500,000 inhabitants for 24 hours a day, seven days a week; supply having been limited to three or four days a week until that point.

To prevent physical risks linked to climate change in the Group's Water activities, monitoring of production site vulnerability to droughts and flooding in the medium- and long-term is carried out periodically using climate risk mapping tools, such as the WRI's Aqueduct, Water Risk Filter. When a risk is identified, the Risk and Investments Department is notified, which makes sure it is included in the annual risk review (section 3.2.1).

5.9.2.1.4 FIGHTING CLIMATE CHANGE

SUEZ's activities are extremely closely linked to the issue of climate change. This can present risks for the Group relating to the economic impact of certain environmental regulations or even operational risks, such as those linked to extreme weather events. However, above all, this is a source of opportunities for the Group: its operational solutions can provide a very substantial positive contribution to the challenges experienced by his clients in this area in terms of decarbonization of their business activities or of their regions, of energy/climate performance, of municipal customers' resilience, and of increasing the safety of industrial processes with regard to the proven effects of climate change.

There are two types of climate-change-related risks that are included in the Group's integrated risk management process:

- for risks relating to the change in environmental regulations and their implementation there is the possibility of a carbon tax impact on certain of the Group's business activities or on those of some of its suppliers;
- for operational risks, service continuity could be impacted due to the global acceleration of the frequency and intensity of periods of drought and flooding. These risks are described in full in section 3.1.3 "Operational risks".

In terms of opportunities, regulatory changes represent a significant driver in developing solutions within the circular economy, such as recovering energy and materials from waste and wastewater or optimizing the energy performance of industrial facilities. The objectives set by states as part of their Intended Nationally Determined Contributions under the Paris Agreement, by municipalities and by industrial companies, have enabled the Group to identify business development opportunities for its low-carbon solutions. In emerging countries, greenhouse gas emission reduction targets mean the Group can promote the transformation of municipal and industrial waste management from an elimination to a recovery model. These new treatment sectors clearly align with the priorities announced by the governments and generate numerous related benefits such as improving hygiene and quality of life in cities.

The acceleration of public and private finance earmarking for low-carbon solutions, as seen in the adoption of the EU's Green Deal in December 2019 and its works that are underway as part of the EU Action Plan for Sustainable Finance Growth, also provide the Group with a change of scale in the development of carbon-free solutions, with the additional inclusion of new economic partners.

Finally, the industrial sector's increased commitment in contributing to a pathway towards carbon neutrality, as seen in the actions of more than 100 large industrial operators who signed the "Business Ambition to 1.5°C – Our Only Future" pledge launched by the UN Global Compact in September 2019, combined with citizens' ever-growing mobilization around the climate emergency, gave even further impetus to the acceleration of the commitment to the climate challenge by all non-state actors, who are clients of SUEZ, that was seen in 2019.

5.9.2.1.5 PROTECTION OF BIODIVERSITY AND ECOSYSTEMS

For SUEZ, biodiversity is:

- a natural asset upstream in the Group's value chain;
- a resource impacted by the infrastructures it manages (networks, plants, landfills, etc.);
- a resource preserved through the Group's business activities contributing to protecting natural assets (reservoirs of biodiversity, ecological corridors, wastewater treatment, artificial wetlands, etc.).

Throughout the SUEZ value chain, there is a close relationship between the Group's business activities and the challenges posed by protection of biodiversity and ecosystems. Habitat protection in the catchment-supply sites helps to preserve drinking water resources, both in terms of quality and quantity, whereas water usage can impact available stocks and biodiversity. For wastewater, dependence is situated at the purification capacity level of the natural environments and is based on the resilience of the receiving environments. Despite its contribution to reducing the environmental footprint of human activities, the waste management activity has an impact on biodiversity, for example soil artificialization, fragmentation of natural habitats, and atmospheric emissions. In regulatory terms, SUEZ is committed to avoiding its impact first, and then to reducing and offsetting its impact on biodiversity, in compliance with the law to re-establish biodiversity, nature and landscapes. Avoidance, reduction, and offsetting actions are incorporated into the environmental management and risk prevention systems of the Group's Recycling and Recovery subsidiaries.

Apart from this operating performance goal, SUEZ aims to contribute, as a regional player, to the protection and restoration of terrestrial, aquatic, marine, and coastal biodiversity by making best practices systematic, and more generally by offering solutions to promote biodiversity to municipal and industrial customers. As a result, the Group offers its customers nature-based solutions, such as artificial wetlands, which contribute to an ecosystem's functioning while also helping eliminate micropollutants, renaturization and ecological restoration work, environmental monitoring and evaluation tools, and dedicated solutions such as combating invasive plant species.

Moreover, as the Group has no activity that directly affects the use of resources relating to animals, the Group's business activities do not require specific additional measures to ensure animal welfare is respected, as described previously.

5.9.2.1.6 SOCIAL AND SOCIETAL CONTRIBUTION OF THE GROUP'S ACTIVITY

As a global environmental service company, SUEZ develops and distributes technological and social solutions for regional development. To be both satisfactory and high-performing, these solutions must take into account the specific needs of the regions they address but also the interests of all stakeholders. In a time of demographic, environmental and digital change, characterized by social tension throughout the world, SUEZ believes the Company's societal contribution is a priority issue. Internal and external surveys show that citizenship is a key criteria, both to attract and retain talents and satisfy public and industrial customers' expectations. In this dimension as well as overall, the 2018 study from the Reputation Institute shows that the worldwide public has a better opinion of SUEZ than of the utilities sector in general.

Accordingly, SUEZ intends to:

- be the mirror to society and to promote diversity, social dialog and cooperation;
- invent solutions for all regions and their inhabitants, in line with the United Nations Sustainable Development Goals;
- share the value that it creates with regional players, notably through its purchasing policy, anti-tax evasion measures and its sponsorship efforts.

5.9.2.1.7 PROMOTION OF HUMAN RIGHTS AND DUTY OF VIGILANCE

Because it manages community assets in sometimes tense political and economic situations, relying on more than 126,500 suppliers worldwide, SUEZ is regularly confronted with situations that put human rights at stake. As a large company that operates around the world, SUEZ is vigilant about respecting human rights, through its employees and its business partners. In accordance with Law 2017-399 of March 27, 2017 relating to the duty of vigilance of parent companies and contractors, SUEZ ensures identification and prevention of serious harm to human rights and fundamental freedoms in order to maximize the economic, social and environmental benefits generated by its presence in different regions.

5.9.2.1.8 PROTECTION OF HEALTH AND SAFETY FOR ALL

SUEZ is committed to preserving the Health and Safety of its employees, subcontractors, customers and all those it works alongside in the course of its business activities. In order to achieve this, the Group is strengthening its Health and Safety policy and its major risk management plan, including the risk of traffic accidents and pedestrian-vehicle collisions for the Group's employees and subcontractors, noted as a salient point for the Non-Financial Performance Statement during 2019.

5.9.2.1.9 FIGHTING CORRUPTION

SUEZ has made ethics an indispensable element of its overall performance improvement. Adherence to these values is essential in all the Group's activities, both in internal relationships within the Company and in its relationships with clients, partners, suppliers and all external stakeholders. Ethics and integrity are therefore an integral part of SUEZ's values, as affirmed under the Shaping SUEZ 2030 plan.

The Group applies a zero tolerance principle, which is listed in its Ethics Guide for business relationships, for any act that could be interpreted as attempted active or passive corruption in its sales relationships. These acts are prohibited in all relationships with customers and technical consultants as well as with competitors, partners, suppliers and subcontractors.

5.9.2.1.10 MAINTAINING KEY COMPETENCIES IN THE GROUP'S EMPLOYEES

The Group employs specialists and executives with a broad range of expertise applied to its various businesses. To maintain key competencies in the Group's current businesses (for example, sales teams for the industrial sector, managers of major projects or the mega-data experts) and develop those linked to its transformation within new activities such as smart cities or digital, the Group must anticipate labor shortages in certain businesses. In addition, the Group's international growth and changes in its businesses require a great deal of mobility among its staff, particularly its executives.

The Group's success depends upon its ability to identify existing skills and to hire, train and retain a sufficient number of employees, including managers, engineers, technicians and sales professionals with the required competencies, expertise, and local knowledge, in an environment in which the competition for this kind of profile may be strong.

This challenge is noted in section 3.1.3, paragraph "Hiring, skills and succession risks" of this Universal Registration Document.

5.9.2.2 Policies and action plans related to challenges identified

5.9.2.2.1 MANAGEMENT OF INDUSTRIAL AND ENVIRONMENTAL RISKS

SUEZ has to take extreme care in monitoring environmental and industrial risks. SUEZ's environmental management is reviewed annually by the Board of Directors' CSR, Innovation, Ethics, Water, and Sustainable Planet Committee. In 2014, the Environmental Risks Management Policy was expanded to include industrial risks and approved by General Management.

In 2016, this policy was clarified to include management of the cybersecurity risk of Industrial Control Systems, consistent with the Information Systems Security Policy.

This policy applies to all Business Units and to central services.

It addresses risks which may be of accidental or natural origin. They may be due to human or organizational factors, equipment breakdowns or malicious acts, including:

- all types of pollution (air, soil, aquatic environments) or environmental nuisance (noise, vibration, odor, visual discomfort, etc.);
- environmental damage as well as property damage and personal injury caused by fire, explosion, machine breakage, natural disasters, collapse of structures, etc.

This policy is consistent with the Global Risk Management and the Occupational Health and Safety Risks policies.

It clarifies the scope, policies and resources to be implemented and the respective roles of the Business Units and headquarters. It also aims to define the Group's management rules and to specify the environmental and industrial standards that are to be applied worldwide.

Where risks are identified, action plans to minimize the potential impact of a near-miss or environmental accident are implemented and monitored until their conclusion.

Section 3.2.2 of this Universal Registration Document describes the management mechanisms for reducing industrial and environmental risks.

Waste: monitoring polluting atmospheric emissions

In the Waste segment, polluting atmospheric emissions are due mainly to the incineration of hazardous and non-hazardous waste. They are monitored constantly in accordance with local, regional and/or national regulations. NO_X, SO_X, mercury and dust/particle emissions are monitored locally and are included in the data collected in the Group's annual environmental reports.

In order to meet expectations of local residents near sites in terms of air quality, the Group has committed to "continuously maintain emissions into the air below the thresholds established by local regulations" as part of its 2017-2021 Roadmap. This performance above the thresholds established by local regulations applies in particular to the 61 waste incinerators (hazardous and non-hazardous waste) managed by SUEZ around the world.

The Group consolidates information on the atmospheric emissions from its incinerators on a yearly basis in its Air Quality Report, which enables the Group to follow up on the action plans, led jointly by the Recycling and Recovery Technology Department and Business Units, that aim to totally eliminate risks of non-compliance or exceeding quality thresholds.

In 2019, average NO_X and SO_X emission rates per metric ton of non-hazardous incinerated waste were 658 g/t and 58 g/t, respectively.

Water and Waste: limiting noise, odor and visual pollution

SUEZ has developed a service called "NOSE", which objectively evaluates and models the impact of the olfactory footprint of wastewater collection and treatment activities or sites, sludge recovery or waste management on local residents.

This service enables the Group to suggest solutions for controlling the olfactory footprint, by keeping it below the level of two units of odor per cubic meter (UO.m^3) and thus meeting regulatory requirements (footprint below the threshold of five units of odor per cubic meter) when they exist.

Specific measures to prevent or treat odors can thus be planned from the design phase of the facilities.

For existing facilities, preventive and corrective measures are implemented to limit olfactory, noise and visual nuisances. The following examples illustrate these actions:

- sizing and installation of dedicated treatment units;
- installation of biogas capture and processing systems;
- operational practices to minimize the generation and dispersion of odors;
- application of masking agents *(e.g.* in the working areas of landfills in operation);
- measurement and verification of compliance with regulatory thresholds for day/night noise levels;
- soundproofing of technical facilities and noisy machines;
- use of hybrid or all-electric waste collection vehicles.

5.9.2.2.2 OPTIMIZED WATER AND WASTE MANAGEMENT: AIMING FOR OPERATIONAL EXCELLENCE

Environmental Management Systems certification

The Group encourages the organizations in charge of the services it offers to obtain ISO 14001 certification or equivalent, according to international standards. Environmental Management Systems certification is especially advanced in the waste businesses. In the water businesses, Business Units may prefer to implement other certifications, such as those related to quality management (ISO 9001), which has been obtained by the main Business Units of the Group, Health and Safety (OHSAS 18001), food safety (ISO 22000), energy management (ISO 50001), or even Asset Management (ISO 55000).

Organization and operational and environmental performance measurement and control systems

Since 2003, SUEZ has employed a special reporting system to manage the rollout of its environmental and industrial actions, to control environmental and industrial risks, to ensure the Vigilance Plan is implemented, and to keep stakeholders informed about its environmental performance and operating results. This system was developed on the basis of recommendations arising from the work performed at international discussion forums like the Global Reporting Initiative (GRI) or the World Business Council for Sustainable Development (WBCSD). It meets the requirements of the NRE law and covers the information required by Article 225 of the French Grenelle II Law of July 12, 2010, in accordance with Ordinance 2017-1280 of July 19, 2017, which transposes European Directive 2014/95/EU, and Decree 2017–1265 of August 9, 2017.

Indicators for measuring and improving environmental and operating performance are reported by the Business Units and consolidated at headquarters, and the results are relayed *via* business intelligence applications. The indicators show the progress made and provide an overall view as well as specific views of each of the Business Units with comparable activities within the Group (benchmarking-type analysis).

In an annual Environmental and Industrial Compliance letter, the CEOs of SUEZ Business Units and subsidiaries express their commitment to the following:

- the data conveyed through the reporting process has been audited and is deemed fair and consistent;
- the Group's Environmental and Industrial Risk Management Policy is applied. Significant risks are identified and appropriate action plans are established, quantified and monitored.

Information regarding the Group's environmental and operational performance is communicated in the SUEZ Integrated Report, as well as through reports published by its Business Units.

Headed up by its network of Environmental and Industrial Risks Officers (EIRO) and its annual technical and performance reports, SUEZ monitors its subsidiaries' environmental activities and ensures that best practices are shared.

Since 2003, SUEZ has also been continuing its efforts to increase the reliability of its environmental data, which is audited by third parties. The aim is to make this non-financial reporting process an increasingly effective guidance tool for supporting the aims of the Group's Sustainable Development Roadmap, as well as a tool used in dialog regarding the ongoing improvement of its non-financial performance.

The reporting exercise carried out in 2019 again contributed to a process of continuous improvement of procedures for gathering and disseminating information relating to the environment, including in particular a review of the definition of the indicators collected in order to align them with the process of monitoring the commitments established in the new Roadmap.

Employee training and information on environmental protection

The Group informs its employees about its positioning, performance, actions and best practices to promote environmental protection by means of its intranet system, its Integrated Report and dedicated events on the subject. Since 2015, SUEZ has committed to a voluntary Integrated Report process, inspired by the reference framework published in December 2013 by the International Integrated Reporting Council (IIRC). The purpose of the integrated report is to illustrate the reconciliation of the Group's financial and non-financial performance and it aims to provide better comprehension of the ecosystem in which the Company operates in order to accordingly strengthen the quality of dialog with stakeholders.

Specifically, in 2018 the Group launched "Ambassador", its first "Serious Game", the purpose of which is to help all employees, particularly new recruits, to understand the Group's businesses and challenges, especially those involving sustainable development. In an urban environment, "Ambassador" simulates relationships between the management of water and waste, the environment and society.

In 2019, the Group supported the Climate Collage initiative and an Environment Collage was made based on a similar principle, aimed at raising awareness of all Group employees through a network of ambassadors.

To support the dissemination of the environmental and industrial risks management policy and its operational rules, a set of distance training modules was developed and distributed within the Business Units.

At the subsidiary level, training and information activities tailored to the local context are also organized as part of the Group's global training policy (chapter 15.1).

The employee representative bodies of the Group and its main subsidiaries, and particularly the European Works Council, are also regularly informed of the progress achieved by the Group in the areas of sustainable development and environmental protection.

Expenses related to the protection of the environment

By the very nature of its businesses, the Group has a direct impact on the environment. It is therefore not relevant to distinguish between expenses that impacts the environment directly and expenses that impacts it indirectly. In accordance with European regulations, the Group records provisions intended to cover the expenses of the long-term monitoring of landfills after their closure. Other provisions are also recorded to deal with potential environmental risks.

Indicators *(in millions of euros)*	2019 data
Provision for current and non-current site restoration	544.1
Provisions for environmental risks	17.5
Provisions for the dismantling of non-nuclear facilities	13.8

Combating food waste

In November 2016, SUEZ published an open source collaboration guide, in French and English, on reducing food waste in company cafeterias, which combined research, interviews and the shared experience of various stakeholders, internal players, experts on the subject, social and environmental entrepreneurs and associations. The guide offers methodologies, solutions and contact information of key persons. Following publication of the guide, SUEZ conducted an internal audit of its headquarters in order to assess and identify the causes of food waste and to implement *ad hoc* solutions. As a result, smaller portion sizes were proposed and employee awareness-raising campaigns were undertaken. A partnership was also signed with the association Le Chaînon Manquant ("The Missing Link"), which collects surplus food from company cafeterias at the Tour CB21 building (SUEZ headquarters) and redistributes it to charities around the La Défense district.

In addition, SUEZ signed a partnership with a start-up to develop an application designed to reduce food waste at company cafeterias. Tested in Spring 2018 by SUEZ employees eating lunch at the restaurants in the Group's headquarters in the La Défense district, the application raises awareness among restaurant users and improve understanding of their consumption habits in order to adjust portion sizes and services, thereby limiting food waste.

In June 2017, SUEZ and Paris la Défense (developer of the La Défense district) launched a working group comprising numerous associations, municipal customers and companies. Its purpose is to discuss collective local solutions that could be applied to the issue of food waste within companies. A quantitative and qualitative analysis of food waste within corporate catering establishments in the La Défense district was carried out, which enabled SUEZ to establish the current state of play, develop an action plan and measure the impact within the business district, as well as propose solutions that can be rolled out in other business districts around Europe. An association under the Law of 1901 was created to this effect, with 20 companies from the La Défense district involved at the end of 2019.

Moreover, and considering the significance of the challenges, the Group's business activities do not require specific measures for the fight against food insecurity or the promotion of responsible, fair, and sustainable food. However, it should be noted that the Group has worked as a partner to the French Federation of Food Banks for nearly 10 years now, and food was included among the subjects covered during the World Health Day organized by the Group on November 21, 2019.

Regeneration of polluted soil

The Group's range of services includes the remediation of polluted soils, with solutions for regenerating soils on site or in a cleanup center. This both limits the use of space by requalifying former derelict land for urban or industrial development operations, and makes recycled land available to land developers in place of surrounding contributed conservation land and particularly topsoil.

This treatment is performed under close environmental supervision and ensures traceability, which makes all parties in the chain more accountable.

SUEZ is supporting Qatar in the rehabilitation of the Al Karaana lagoons, where almost 4,000 cubic meters of untreated municipal and industrial wastewater from Doha's industrial zone had been released into the lagoon every day from 2006. SUEZ is responsible for the decontamination of the site with a "thermal desorption" unit enabling treatment of the most polluted sediment.

5.9.2.2.3 MAKING THE WATER SUPPLY SAFE AND SECURE: GUARANTEEING AVAILABILITY AND QUALITY OF HYDRAULIC RESOURCES AND DISTRIBUTED WATER

Adapting to the consequences of climate change regarding water resource availability

As climate change is rapidly accelerating, conserving water resources is a major priority for SUEZ. For this reason, in line with its commitments for the climate adopted in August 2015, and as part of its 2017-2021 Sustainable Development Roadmap, the Group has committed to:

- **"Save the equivalent of the water consumption of a city of 2 million inhabitants"**

  Reduction of water usage has received particular attention throughout the world, through demand management programs. These include infrastructure measures (reducing leaks) and other measures targeting user behavior: putting in place tariff structures to encourage water saving, and awareness campaigns to combat waste. In addition, the objectives of such programs increasingly exceed the mere optimization of economic efficiency (reducing costs of consumable materials), and include careful management of the resource as an end in itself.

  The Group contributes to optimizing existing water resources either *via* close status monitoring, ongoing precautionary sampling over the long term or by encouraging users to consume water intelligently by carrying out awareness actions for the benefit of users. The Group innovates constantly to limit water waste, since the resource is scarce and increasingly costly to produce, particularly in regions of high water stress, by offering geo-filtration techniques that consist of injecting purified surface water into underwater reservoirs and accelerating the rollout of "smart" solutions.

  Smart metering solutions provide a means of optimal water resource management, especially through improved consumption forecasts, online calculations of water network yields and the precise location of leaks. Smart meters also offer users the ability to control their water consumption. Furthermore, Aquadvanced Water Networks, the flagship product of the new Advanced Solutions line, is a tool for improving monitoring of drinking water systems through the analysis of numerous data provided by sensors measuring flow, pressure and rate. As part of its 2017-2021 Roadmap, SUEZ supports its objectives in the area of optimized resource management by committing to "Accelerate the digital revolution in water and waste solutions to benefit agriculture, industry, cities and citizens" through a 20% increase in the number of connected objects by 2021 (Commitment 10 of the Roadmap).

  The improvement of drinking water network yields is also part of developing new "Design-Build-Operate" contracts, such as the one signed in December 2019 in Mangalore in India. The contract concerns the extension, rehabilitation, and operation of the drinking water system. The works, which will last three years, will include the design and installation of 1,388 kilometers of drinking water pipelines, as well as the design and construction of a filtration unit, a water reservoir, and pumping stations. This works phase will be followed by an eight year period of operation and maintenance for the whole of the distribution system. SUEZ will also be responsible for improving the network yield, quality of water distributed, and customer service.

- **"Systematically suggest to our customers resilience plans for addressing the impact of climate change"**

  Prevention is just as important as adaptation: SUEZ is developing predictive tools for preventing flood risk for municipal customers, regardless of their size.

  In some regions, the Group must adapt to the impacts of climate change on the operations of its facilities. In Chile, an increase in elevation of the 0°C isotherm in the Andes causes an increase in frequency and intensity of turbidity episodes in the Mapocho river, which can alter drinking water production capacity in Santiago. In order to confront these extreme climate events, the Group is investing in infrastructures that increase facility autonomy by up to 48 hours and ensure service continuity.

  In countries that are more vulnerable to climate change (particularly in Southern Europe, the Middle East or in Australia), the Group offers its customers seawater desalination solutions to ensure drinking water availability in areas that do not have sufficient quantities or that have repeated drought episodes. To ensure the sustainability of this solution, SUEZ worked on energy consumption for its desalination plants. In Australia, for example, all the plants are powered by renewable energy. In addition, SUEZ is a member of the Global Clean Water Desalination Alliance that aims to power desalination plants with at least 80% renewable energy by 2035. To keep up with growing demand from these countries, the Group has set a goal of tripling the availability of alternative water by 2030, which includes the ability to produce drinking water using seawater. This target also includes reuse of treated wastewater that allows water usage from nature to be limited, especially in zones under water stress. This solution has been rolled out in many wastewater treatment plants, such as Biofactoria in Santiago, Chile, which treats 100% of the city's wastewater and reuses the wastewater for agricultural irrigation.

  SUEZ also supports residential customers and industrial customers in better use of the resource, allowing them to reduce their impact on the water resource. In France, SUEZ has established the On'Connect Coach solution for residential customers that allows the user to monitor its water consumption and associated energy usage *via* an online platform, thus preventing the risk of leaks, and offers advice on usage optimization and reduction of the environmental impact. For its industrial customers, SUEZ offers the Waterlily solution that allows them to optimize the water footprint of their industrial sites. This solution, in accordance with ISO 14046, provides a precise diagnostic of the water cycle on the site and allows the areas for improvement and the most suitable technologies to be identified in order to reduce water consumption throughout the production chain.

Even though water consumption in the Group's industrial processes is very low in contrast to the volumes managed by the drinking water production business, this consumption is still subject to streamlining actions on the sites that the Group manages. SUEZ contributed to the establishment in December 2015 of the Business Alliance for Water and Climate, in partnership with CDP, the World Business Council for Sustainable Development and the CEO Water Mandate of the United Nations Global Compact, whose purpose is to gather industrial players together to commit to assessing and reducing their water footprints. Now acknowledged by the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) as one of the alliances of the "water" theme of the International Climate Agenda, the Business Alliance is a group currently comprising 51 companies on five continents.

Distributed water: the need for quality to protect end customers

Concern for consumers' health is the reason for implementing major control mechanisms within the Group, as well as for the use of methods and tools to prevent a potential health crisis. Self-monitoring programs for water quality in the system are, in general, superior to regulatory requirements and the Group's sites are equipped with remote surveillance systems or 24-hour operational alert systems. Service continuity is ensured by organizing work and especially through on-call systems.

The Group consolidates information on how its water production quality and water distribution contracts are performing on a yearly basis in its Water Quality Report, which enables the Group to follow up on the action plans, led jointly by the Water Technology Department and Business Units, that aim to totally eliminate risks of non-compliance or exceeding quality thresholds.

SUEZ assesses the quality of drinking water produced and/or distributed by its entities according to 21 bacteriological and physicochemical parameters from European Directive 98/83/EC of November 3, 1998 regarding water intended for human consumption. In accordance with the principles of this Directive, exceeding quality limits is deemed non-compliant if this pertains to sanitary parameters, or simple overstepping where parameters are just quality references measuring an operating performance level. Non-compliance analysis is consolidated based on populations served by taking into account, for a case of non-compliance, the entire population of a distribution unit, which represents an upper bound with respect to the population actually concerned.

On this basis, the Group's compliance for water produced and distributed was 99.67% in 2018.

In addition to this prevention policy, the Group has developed crisis management procedures in liaison with local authorities in the event of an accidental deterioration of water quality.

Regulations concerning distributed water quality parameters are constantly changing in line with the emergence of new risks. Aside from bacteriological and physicochemical criteria, certain "emerging" pollutants (pharmaceutical products, endocrine disruptors, etc.) are of particular concern to experts and operators in the water and environment sector. The Group has put in place specific research programs in this area so as to be better able to understand, analyze, monitor and handle such new molecules, while participating in public debate on the subject. In recent years, large-scale research programs have been dedicated to developing solutions to treat micropollutants in wastewater discharge; these come mainly from transposing the procedures used for treating drinking water. We can thus cite the linking of ozone oxidization to biological treatment processes, a procedure applied at the wastewater treatment plant in Sophia Antipolis where performance guarantees are required for micropollutant treatment; and the adsorption of micropollutants using active carbon, which can be used in combination with the previous procedure, as envisaged at the Lausanne wastewater treatment plant. Furthermore, catalytic ozone procedures allow these compounds to be destroyed or reduced to biodegradable blocks. They are currently being tested at the Achères wastewater treatment plant, in partnership with SIAAP, the Greater Paris Wastewater Authority.

The Group is also committed to developing partnerships with local authorities, industrial players and farmers to ensure the qualitative protection of water resources in river basins.

For the most part, treating wastewater in facilities managed by the Group contributes more generally to significantly reducing the content of polluting substances (organic matter, nitrogen, phosphorus, etc.) discharged into the environment and that could reduce the quality of water resources.

5.9.2.2.4 COMBATING CLIMATE CHANGE: REDUCING GREENHOUSE GAS EMISSIONS

Group commitments

The Group's 2017-2021 Roadmap commitments for the climate, combined under the principal aim to "Be the leader in the low-carbon economy", use the commitments already adopted by the General Management of SUEZ in August 2015, in line with the "2 degrees Celsius" objective from the COP21 conference, and contributing to the Sustainable Development Goals adopted by the United Nations in September 2015. They aim to reduce greenhouse gas emissions efforts linked to the Group's operating activities as well as the activities of its municipal and industrial customers, in particular by promoting the circular economy in a way that structurally reduces the greenhouse gas emissions and protects resources. According to a *Material Economics* study, recovering the four most carbon-intensive materials (metal, plastic, aluminium and cement) could reduce global greenhouse gas emissions by 3.6 billion metric tons by 2050. This step was validated by the Science Based Targets international initiative in December 2017. SUEZ was the first environmental services company in the world to receive this recognition.

During the launch of the Group's Shaping SUEZ 2030 strategic plan in October 2019, the Group's General Management wanted to strengthen the ambition of these commitments to bring them within the 1.5°C target recommended by the IPCC in its special report on global warming in October 2018. As part of the 2050 carbon neutrality outlook, the Group is now committed to:

- increasing its greenhouse gas emissions target from -30% to -45% over the whole of its business scope by 2030 (2014 baseline);
- avoiding the emission of 20 million metric tons of greenhouse gas emissions per year by 2030 for its customers, compared to 10 million currently.

The Group also aims to reduce its greenhouse gas emissions by 10% over the short term (2021 objective, 2014 baseline), and progress has exceeded 50% since 2017.

The Group's climate commitments break down as follows:

- **"Reduce GHG emissions over the entire scope of activities by more than 45% by 2030"**

  In 2019, the Group established detailed mapping of its direct and indirect greenhouse gas emissions: emissions per business, activity, source, and country, enabling priority actions to be defined to achieve the target of -45% in 2030, and then carbon neutrality in 2050:

  - **Energy management: energy efficiency, low-carbon transportation and purchasing green energy.**

    Use of electricity by the Group's Water business and consumption of fuel for its collection vehicles are the two items representing a significant portion of the Group's energy use.

    As part of its 2017-2021 Sustainable Development Roadmap and in line with its commitments for the climate adopted in August 2015, the Group made increases in the energy performance of all of the sites it manages, together with streamlining waste collection logistics and bolstering its "clean vehicles" policy, three levers of its commitment to reduce GHG emissions.

    It should, nonetheless, be noted that the sites managed by SUEZ are occasionally obliged to increase their energy consumption to improve services rendered, *e.g.* treating pollution more effectively or increasing proportions of waste recovered, or due to heightened regulatory obligations related to environmental protection. Improving the energy efficiency of its processes is therefore a challenge.

    The Group strives to improve the energy efficiency of all processes it manages. It is especially seeking to reduce consumption of energy related to its collection activities, transportation of waste and urban cleaning carried out with a fleet of 11,354 heavy vehicles, representing GHG emissions of 442,000 metric tons of CO_2 equivalent in 2019, *i.e.* nearly 7% of the Group's direct emissions. It strives to reduce fuel consumption by optimizing collection rounds (frequency and distance traveled, for example) and by introducing new engines and alternative fuels, as well as by training drivers to drive more economically.

    In waste treatment facilities, examples of actions implemented include purchasing green energy, implementing new technologies, installing variable speed mechanisms, controlling consumption through metering, correcting the power factor and using new lighting systems (solar, LED, etc.).

    In the water sector, context-specific action plans have also been put in place: purchasing green energy, like the Water Spain subsidiary, which committed to reducing its energy-consumption related greenhouse gas emissions by 90% by 2021 and for which electricity from renewable sources currently represents 96% of its power consumption, renovating facilities and introducing more efficient equipment, implementing variable-speed pump systems, installing systems to modulate pressure in drinking water supply networks, establishing automated tools for checking treatment processes, and creating inspection plans to identify potential energy savings. More widespread consumption of electricity from renewable sources will be one of the main drivers in achieving the target set by the Group for 2030.

    The Group monitors changes in energy regulations at the European level (EU Energy Efficiency Directive, the Climate and Energy Package, etc.) and at the national level, in France, such as the Energy Transition for Green Growth Law of August 17, 2015. Its subsidiary Water France has already achieved ISO 50001 certification for 100% of its energy invoicing, to address the new regulatory framework in France regarding the obligation of companies to carry out energy audits. Today, all actions taken by the Group in this area are in line with these regulations.

  - **Production and internal consumption of renewable energy**

    As part of its 2017-2021 Sustainable Development Roadmap, and in line with its commitments for the climate adopted in August 2015, SUEZ has committed to increase the Group's renewable energy production by 10% by 2021, in conjunction with local policies of transitioning from landfills to recovery and through a substantial increase in its production of biogas.

    A key priority for SUEZ, the renewable energy produced from incineration plants, anaerobic digestion plants and biogas recovery from landfills and wastewater treatment plants has increased continuously in recent years to reach 8.68 TWh in 2019. A portion of this energy is dedicated to internal consumption and thus helps reduce the Group's greenhouse gas emissions. It can be estimated at 4,879 GWh for 2019, *i.e.* 57% of the Group's total energy consumption.

    The two indicators "Useful energy production of Group Recycling and Recovery activities" and "Useful energy production of Group Water activities", consolidated and audited annually, enable follow-up and monitoring of this energy performance (section 5.9.3.).

  - **Capture and recovery of biogas**

    In the waste sector, a change in treatment methods from elimination to recovery of materials and energy should lead to a gradual reduction in greenhouse gas emissions related to landfilling waste, namely methane, which contributes to global warming 28 times more than CO_2. For existing landfills, SUEZ offers its customers the most high-performance solutions possible from an environmental standpoint, particularly capturing biogas and turning it into renewable energy. Also, often used for facility internal energy consumption, this technology enables a reduction in both the direct and indirect greenhouse gas emissions of landfills. Establishing solutions for increased biogas capture on landfills will also be one of the main drivers in achieving the target set by the Group for 2030.

– **Digitizing Waste activities**

As with the Water business and as set out in Commitment 10 of its 2017-2021 Roadmap, "Accelerate the digital revolution in Water and Waste solutions to benefit agriculture, industry, cities and citizens", SUEZ is committed to the digitization of its Waste activities, which will improve management and optimize environmental impacts, and especially greenhouse gas emissions. In this way, smart waste covers the entire waste value chain: at the collection stage, geo-tracking trucks streamlines movements; in the sorting sites, robotized arms improve recycling rates; lastly, end users benefit from new services, such as SITA.scope, SITA.connect and e-commerce.

- **"Enable our customers to avoid emitting 20 million metric tons of GHG per year by 2030"**

  Emissions avoided by SUEZ customers are part of emissions linked to the "use of goods and services that the Group produces", within the meaning of information obligations related to Article L. 225–102–1 of the French Commercial Code, which relate to materials and energy recovery activities. Accordingly, because of the multitude of sources available, the Group decided to base its calculations of avoided emissions on public data issued by Prognos on the Europe-27 scope, as 75% of waste processed by the Group is in Europe. As calculating avoided emissions is very sensitive to the choice of emission factors used, the Group has used the same source of information since 2012 to ensure comparability of data. Uncertainty about calculated data remains high due to the wide variability of emission factors that may be used.

The sources of emissions avoided are mainly linked to the implementation of circular economy solutions that the Group offers its municipal and industrial customers, namely:

- materials recovery by means of:
  - waste recovery, sorting and recycling,
  - composting,
  - recovery of residual waste from incineration of non-hazardous waste,
  - production of solid recovered fuel;
- energy recovery by means of:
  - incineration of municipal or industrial waste,
  - burning of biogas recovered from landfills,
  - energy recovery from biogas produced from wastewater.

To meet this goal, the Group set additional targets aiming to increase emissions avoided through material and energy recovery, respectively: "Double the volume of recycled plastic" and "Increase the production of renewable energy by more than 10%", a portion of which is resold to Group customers.

Group scope 3 – greenhouse gas emissions

The other items falling under emissions produced by the Group and related to the use of its goods and services ("Scope 3 downstream", pursuant to the GHG Protocol) are stated annually in SUEZ's published response to the CDP Climate questionnaire, as are other items related to the "Scope 3 upstream" classification. The most significant item of "Scope 3 downstream" is related to end users' domestic water use, involving clean hot water production, cooking and other activities. SUEZ has relatively limited power to act on this item, but it can contribute to reducing it by recommending solutions to control consumption, such as remote meter reading, and conducting public awareness campaigns about saving water.

Committing responsibly to climate policies

Throughout 2019, SUEZ continued its commitment toward collective projects to accelerate the involvement of non-state actors in climate action, be it in terms of contributing to the circular economy, reducing greenhouse gas emissions or implementing solutions aimed at protecting water resources when faced with the consequences of climate change. The Group's Chairman participated in the United Nations General Assembly and the Global Compact during Climate Week in New York in September 2019. The Group was one of the first signatories to the United Nations' Global Compact Pledge "Business Ambition for 1.5°C – Our only future" that was launched during this event, in this way reaffirming the increased ambition for its climate commitments. It was also invited to speak on the key role of water management in the joint achievement of the climate objectives and of the United Nations Sustainable Development Goals.

During the COP25 in Madrid in December 2019, SUEZ's Chief Executive Officer reminded the high level meeting of the United Nations Global Compact's Caring for the Climate initiative, and the twofold necessity of accelerating the reduction in companies' greenhouse gas emissions and of their contribution to the policies of adaptation to cope with the proven effects of climate change. Furthermore, SUEZ is a partner of several research centers or organizations that contribute to stepping up the fight against climate change, such as the Ellen MacArthur Foundation, the National Institute of the Circular Economy, the Climate Chance association, the Elsa-Pact research chair on life cycle analysis, and the French Meteorological Society (*Météo et Climat* – SMF). In 2018 and 2019, SUEZ contributed to the ZEN 2050 study carried out by *Entreprises pour l'Environnement* to explore how all the business sectors can contribute to the feasibility of carbon neutrality in France by 2050. Finally, since 2017, SUEZ has partnered WWF France in a joint initiative to promote the creation of local circular economy loops to support climate change commitments in French towns.

The Group's carbon profile

In 2019, the Group's carbon profile has been calculated taking into account a methodological adjustment consistent with the Group's activities: taking into account only the "combustion" emission factor in the GHG emissions produced and avoided related to energy consumption, the upstream and downstream parts falling under Scope 3. For comparability purposes, the data for the years 2017 and 2018 have been recalculated using the same methodology.

SUEZ emissions in 2019 (in tCO_2-eq)

	2017		2018		2019
	Methodology URD 2019	Methodology DDR 2018	Methodology URD 2019	Methodology DDR 2018	Methodology URD 2019
Waste	6,259,814	6,021,804	6,526,252	6,702,570	6,649,366
Water	2,638,712	2,505,638	2,421,716	2,463,201	2,705,700
Industry[(a)]			90,003	102 551	113,606
Total	**8,898,526**	**8,527,442**	**9,037,971**	**9,268,322**	**9,468,672**

Emissions avoided by SUEZ customers in 2019 (in tCO_2-eq)

	2017		2018		2019
	Methodology URD 2019	Methodology DDR 2018	Methodology URD 2019	Methodology DDR 2018	Methodology URD 2019
Waste	10,576,546	9,092,688	9,703,735	9,675,369	9,898,531
Water	248,732	281,394	305,198	360,574	319,323
Industry[(a)]			286	286	331
Total	**10,825,277**	**9,374,082**	**10,009,218**	**10,036,229**	**10,218,184**

(a) The industrial business line includes all water production and wastewater treatment activities for industrial companies, as well as the production of equipment and chemical products.

The 2019 Group's emissions may be broken down as follows:

- in its waste business: 6,649,366 metric tons of CO_2-equivalent, *i.e.* 70% of total Group emissions. Up to 97% of these emissions are direct, resulting from fugitive methane emissions released when waste is landfilled or from greenhouse gases produced through incineration or emissions from waste collection vehicles. These also include emissions from the vehicles of subcontractors transporting incoming waste and the secondary raw materials leaving facilities managed by the Group (207,328 tCO_2-eq.);
- in its water and wastewater business: 2,705,700 metric tons of CO_2-equivalent, *i.e.* 29% of total Group emissions. These emissions are primarily indirect (94%): they result essentially from the use of electricity in water treatment processes.

Emissions avoided by Group customers break down as follows:

- in its waste business: 9,898,531 metric tons of CO_2-equivalent, *i.e.* 97% of total Group emissions avoided. Emissions avoided correspond to reductions in emissions for Group customers, classified as scope 1 (by using solid recovered fuels), scope 2 (by using energy from waste or wastewater), or scope 3 (by using secondary raw materials);
- in its water and wastewater business: 319,323 metric tons of CO_2-equivalent, *i.e.* 3% of total Group emissions avoided. The emissions avoided correspond to scope 2 emission reductions for Group customers by using energy produced from the digestion of sludge from wastewater treatment plants (biogas transformed into biomethane or into natural gas).

5.9.2.2.5 PROTECTION OF BIODIVERSITY AND ECOSYSTEMS

Continual strengthening of the commitment, in line with regional strategies

Since 2008, the Group's commitment to protecting and promoting biodiversity has been part of its Sustainable Development Roadmap, which applies to all its activities around the world. Commitment No. 14 of the Group's 2017-2021 Sustainable Development Roadmap, "Promote biodiversity and ecosystem services", is therefore split into two objectives: "Implement a biodiversity strategy within all the Group's Business Units" and "Establish biodiversity action plans at 50% of the priority sites managed by the Group". This approach has allowed the Group, with the support of a network of internal experts, to initiate biodiversity action plans in all countries in which it operates; these plans aim to prevent or reduce the impact of the Group's activities on biodiversity and to promote it.

In July 2018, the Group reaffirmed and extended its commitments by joining the Act4Nature initiative, which brings together 65 major French companies associated with business networks (Entreprises pour l'Environnement, AFEP, MEDEF, C3D, etc.), scientific partnerships (Agence Française pour la Biodiversité, MNHN, OREE, etc.) and environmental NGOs. At the end of 2019, following the revision of the French national biodiversity strategy in which the Group has been involved since 2013, SUEZ supported the launch of the initiative *Entreprises Engagées pour la Nature* – Act4Nature France, led by the Office Français pour la Biodiversité (OFB).

SUEZ's commitments as part of the Act4Nature consist of:

- **Measuring the impacts of the Group's business and promoting biodiversity**

  To achieve this, SUEZ relies on numerous expert partnerships with organizations specializing in the protection of nature; in France, this includes such bodies as the Muséum National d'Histoire Naturelle (MNHN – National Museum of Natural History), the Ligue de Protection des Oiseaux (LPO – French League for the Protection of Birds), and so on. In 2017, SUEZ renewed its study and research partnership with the MNHN for four years, with the primary aim of further investigating the challenges of biodiversity on the sites managed by SUEZ in France, improving the integration of these sites into ecological networks, providing information to contribute to the national inventory of natural heritage, and promoting the international use of the Ecological Quality Indicator, developed by the Museum in partnership with SUEZ and already in use on some sixty sites in France.

  In 2019, 39.8% of priority sites managed by the Group around the world were covered under a biodiversity action plan.

  The Group is also seeking to determine the ecological footprint of its activities. In 2019, SUEZ joined the B4B+ Club (Business for Positive Biodiversity) led by CDC Biodiversity in evaluating the biodiversity footprint applied to businesses' value chains.

- **Strengthen the way in which biodiversity is taken into account in the value chain of the Group's business activities**

  The Group now offers solutions that make a direct and positive contribution to biodiversity, such as renaturization and site restoration work, monitoring, ecological engineering, nature-based solutions, proposals applied to nature in urban locations, and regional approaches.

- **Promote circular economy solutions that boost biodiversity**

  SUEZ is committed to providing its expertise to regions to help them apply new integrated water and waste management approaches that limit flows of macro- and microplastics dumped into watercourses and coastal areas.

  Apart from the plastics problem, SUEZ proposes solutions that have a positive impact on biodiversity, such as reuse of treated wastewater or the production of secondary raw materials.

- **Integrate biodiversity in research and innovation programs**

  SUEZ is involved in partnerships with the Intergovernmental Oceanographic Commission of UNESCO and NGOs specialized in marine biodiversity and has launched an internal R&D program on the subject.

- **Promote a framework of actions that boost biodiversity**

  The Group's Shaping SUEZ 2030 strategy, published in October 2019, includes passion for the environment as one of its shared values. In particular, the Group has made an i-learn module on biodiversity awareness available to all employees, helping them understand the key concepts and become involved at every level of the organization. Furthermore, the technical guides for on-site biodiversity management have been disseminated within the BUs.

  SUEZ's Water Spain subsidiary developed a scientific tool for internal participation called Biobserva, which won a European Commission European Business Award for the Environment. This tool raises awareness among employees on local biodiversity (https://www.biobserva.com/).

- **Knowledge sharing**

  In addition to its partnership with the MNHN, SUEZ is involved in a program to support CIFRE (Industrial Research Training Convention) theses on biodiversity. After having coauthored a doctorate thesis on integrating biodiversity in environmental accounting, the Group is supporting a thesis led by OREE on the role of ecosystem services in adding value to real estate.

Acting to protect the oceans

In line with the objectives in its Sustainable Development Roadmap and with its commitment to the Act4Nature initiative which particularly emphasizes this point, SUEZ is working hard to protect the oceans by reducing land-based pollution primarily caused by plastic. The challenge is as behavioral as it is technological: the Group is working in partnership with UNESCO's International Oceanographic Commission and specialized NGOs, employees and citizens to avoid plastic waste in oceans, while offering more solutions to treat microplastics in wastewater.

In 2019, the Group joined forces with the Alliance to End Plastic Waste led by the WBCSD to bolster its commitment to fighting plastic marine pollution alongside 24 other industrial chemical and retail companies. SUEZ's role there is to promote eco-design and to facilitate the use of recycled plastic in packaging. In France, the Group is working with Fondation de la Mer to establish a reference framework for companies' contributions to achieving the SDG 14 targets.

Finally, the Group launched a global campaign to rally employees to organize events to pick up plastic waste in coastal areas and catchment areas. Called #suez4ocean, this campaign includes an interactive map that shows all the local initiatives led to reduce pollution in coastal and marine areas upstream.

5.9.2.2.6 SOCIAL AND SOCIETAL CONTRIBUTION OF THE GROUP'S BUSINESS ACTIVITIES

Promoting diversity, social dialog and cooperation

Since 2010, SUEZ has devised a policy and joint initiatives with all the Business Units to promote diversity and Equal Opportunities (see section 15.1.4). As part of its Sustainable Development Roadmap, SUEZ is making it a priority to foster gender diversity within the Group. In order to attain 33% women in management for the entire Group by 2021, the professional equality Roadmap relies on various levers such as hiring, reducing wage gaps, promoting women internally, the working environment or the corporate culture. The proportion of women among new hires sharply increased in 2019: 33.7% of manager new hires in permanent contracts were women (*versus* 33.4% in 2018) In 2019, women represented 22.2% of the workforce, 28.2% of management, and 45% of Talents. SUEZ encourages cultural diversity and takes tough action against all forms of discrimination, such as discrimination linked to sexual orientation and religious affiliation. The Group is also rolling out an ambitious policy to integrate disabled people into the workplace. In 2019, the Group hired 1,499 people with disabilities.

SUEZ strives to organize and boost social dialog measures and sign collective bargaining agreements (section 15.1.3). The goal is for 95% of employees to be covered under social dialog systems by 2021. In 2019, 86% of employees of the Group were covered, either directly within their legal entity connection, or at a more comprehensive level (86.7% in 2018). SUEZ is developing innovative social dialog systems, for example, the Observatoire Européen des Métiers, to better identify the businesses that are under pressure and those that will be in the future; in 2019, the Observatoire looked at autonomous driving. In 2019, members of the European Works Council were also trained on the circular economy and a system was launched to evaluate their experience and the competencies acquired during their term of office. SUEZ is also committing to continue its now standard system for internal engagement surveys to reach a 100% coverage rate (cumulative over the past three years) and a 60% participation rate in these surveys (section 15.1.3). Based on their results, the Group puts in place the necessary improvement plans.

SUEZ is fostering a culture of cooperation and undertaking to encourage new collaborative practices by increasing the coverage rate of tools such as Skype, Yammer, OneDrive, Sharepoint, Groups, etc., so employees can build internal relationship systems using internet communities. The Group is prioritizing the digital transformation for training (section 15.1.3) and bolstering its cybersecurity and personal data protection action plans (section 5.9.2.2.7). With its customers, the Group is promoting contractual models and shared management principles (industrial framework agreements, semi-public companies, joint ventures) to promote efficiency and performance for industrial companies and local authorities. Lastly, SUEZ is committing to develop partnerships with entrepreneurs, associations and players in the field of research using an Open Innovation approach (section 5.4.3. and the paragraph on "Developing customized solutions for all regions and their residents" below).

Optimizing the Group's socio-economic footprint and fighting tax evasion

Every year SUEZ publishes a chart showing the redistribution of cash flows generated by its business activities to the various stakeholders (suppliers and service providers, employees, states and municipalities, shareholders, financial institutions, NGOs and communities). In addition, SUEZ carries out a socio-economic footprint study every year to find out the direct and indirect impacts in terms of jobs generated by the Group throughout the different sectors of the global economy. The LOCAL FOOTPRINT® method makes it possible to estimate how the effects of business activity are propagated along the entire supply chain. In 2018, the Group supported more than 270,000 direct and indirect jobs around the world, almost 3 times the number of direct jobs provided by the Group's subsidiaries.

Additionally, the Group's policy promotes adherence to and compliance with local and applicable tax legislation and regulations in each of the States where Group companies operate as well as compliance with international tax rules and standards.

The Human Resources social innovation department's goal is to "make employment and the circular economy come together" in the regions where SUEZ operates, by supporting the needs of the subsidiaries as much as possible (integration clauses in procurement, employee social commitment, etc.) and by increasing collaboration with local players. Social innovation takes place on a local level through the *Maison pour Rebondir* (the Bounce-back House) program in France. Backed by its experience from the SUEZ social innovation laboratory created in Bordeaux eight years ago, the *Maison pour Rebondir* has started expanding into other regions (in the Paris region, in four different locations), and is becoming the operational mechanism for implementing the Group's social innovation measures. *Maison pour Rebondir* schemes serve as an internal and external "SUEZ one-stop shop" in the areas where they are located for questions related to integration through employment and through the social and solidarity economy (section 15.1.4).

With more than 126,500 suppliers, SUEZ has rolled out a responsible purchasing policy that binds subcontractors and suppliers to its sustainable development requirements, contributes to the progress of the sector as a whole and encourages the emergence of eco-industries. SUEZ is committed to behaving toward suppliers with fairness, transparency and impartiality, in accordance with regulations and according to the rules and principles of its Ethics Charter (section 3.2.4), its Human Rights Policy and its Vigilance Plan (section 5.9.2.2.7).

Approved by the Group Management Committee in 2016 and distributed to all subsidiaries, the Group's procurement policy aims specifically to:

- innovate in partnership with suppliers by contributing to their integration into new services and into the circular economy;
- develop competitiveness by optimizing resources and implementing win-win supplier relationships and partnerships;
- contribute to the development of regions by fostering support for SMEs and the promotion of diversity among suppliers in the social and solidarity economy, economic inclusion, and disabled workers (sheltered employment in France) sectors.

The ethics and sustainable development clauses are specified in SUEZ's General Conditions of Purchase and standard contracts. In 2019, 56% of the Group's supplier contracts contained a CSR clause.

SUEZ has been a signatory to the Responsible Supplier Relations Charter (formerly known as the Intercompany Relations Charter) in France since 2012 and the SME Pact since 2013, and has set up a mediation process to address any difficulties SMEs may have in making themselves heard as part of their relations with the Group. SUEZ is developing a supplier relationship barometer alongside a panel of very small enterprises/SMEs/intermediate-sized enterprises in order to measure the quality of the business relationship and the impact of actions implemented with its suppliers. SUEZ then establishes an SME Pact action plan aimed at developing business relationships and partnerships that promote innovation. SUEZ also participates in competitiveness clusters related to its businesses and is involved in the work of COSEI (Strategic Orientation Committee of Eco-Industry Sectors).

Developing customized solutions for all regions and their residents

SUEZ provides customized and adjustable solutions according to the specific needs and challenges of each region, the size of local authorities, the limitations of farmers, and/or the location of industrial companies. Whether it is mobile water treatment units to help some areas of the world that lack adequate access to water, mobile desalination units or mobile wastewater treatment units, SUEZ is committed to developing them. At the end of 2019, SUEZ installed 236 units worldwide producing 1,300,000m^3 of water per day in more than 42 countries, such as Indonesia, Mali, Ivory Coast, or the Caribbean and Pacific islands.

Since 1990, SUEZ's activities in developing countries have provided drinking water to 24.5 million people and wastewater systems to 16.9 million people. Having officially committed itself to implementing the right to water and wastewater services since the United Nations recognized this right in 2010, SUEZ intends to contribute to the achievement of SDG 6 in accordance with Commitment No. 15 of its 2017-2021 Sustainable Development Roadmap, based on three additional objectives:

- to develop sustainable access to essential services within the framework of our contracts;
- to allocate EUR 4 million per year to the SUEZ Foundation and support 30 projects per year to promote access to essential services in the countries with the greatest need;
- to share our know-how in order to accelerate access to services by supporting training and making our expertise available.

The expertise developed by the Group, which has been consolidated under the "Services for All" program since 1999 and rolled out on five continents, now puts SUEZ in a position to address the issue of access to essential services in both developed and developing countries.

- In developed countries, SUEZ offers to assist its customers in the determination and establishment of social water policies that aim to guarantee access to services for persons in economic difficulty. All programs are defined in concert with local actors, whether they involve implementing a mediation and social assistance program, setting up special pricing or creating subsidy mechanisms, in order to address the specific challenges of the region in the best manner possible. In 2019, the solidarity fund set up by the Group and its association partners in Barcelona has awarded nearly 36,000 grants, delivered to households in precarious circumstances to help them pay their water bills.
- In order to address the major issues facing cities in developing countries regarding access to services, the Group has made the expertise and experience it has acquired available to customers to improve and extend services in disadvantaged neighborhoods with no services. The Group's know-how on the subject was especially of use in Argentina, South Africa, Algeria or more recently in India and, from January 1, 2020, in Senegal, where it combined knowledge of water businesses with mastery of social engineering practices to ensure good understanding in a local context, involvement of communities throughout the project and establishment of technical and sales solutions appropriate to the circumstances.

  In this way, the INMAE program, which has been developed as part of the National Initiative for Human Development (INDH) since 2005, aims to connect 90,000 homes in the informal settlements of Greater Casablanca to drinking water, wastewater systems and electricity. More than 56% of households involved now have access to these services at home. Work and studies are underway to connect an additional 28% of homes.

  In India, 163 million inhabitants do not have safe access to drinking water, only 16% of homes are served by a water distribution system, and 70% of wastewater in towns and cities and 50% of industrial effluents are not treated. Present in India for more than 30 years, SUEZ supplies 44 million people with drinking water and 4.8 million people with wastewater services. SUEZ's expertise has benefited 15 million people through performance improvements in the water networks and in drinking water distribution (*e.g.* 8,000 leaks identified). The Group has designed and built 250 drinking water and wastewater treatment plants and was operating 25 plants in 2019. SUEZ supplies drinking water and wastewater services for large cities such as New Delhi, Mumbai, Bangalore and Calcutta.
- SUEZ is therefore extending its "Services for All" expertise to waste treatment and recovery activities by developing know-how based on the creation of partnerships with waste collectors who operate informally on landfill sites in emerging and developing countries. To allow them to keep the revenue generated by their activities while also improving their living and working conditions, SUEZ is offering a solution to its municipal customers that is based on the creation of a formal recycling cooperative. Consisting of a comprehensive program that combines social mediation, training (accounting, legal, technical, etc.), the provision of equipment and administrative support, this solution is in place most notably in Meknes, Morocco, where a cooperative of 150 sorters has been active since 2014 and is an integral part of the SUEZ Advanced Solutions waste recovery offer.

Generally speaking, SUEZ works hard to take the UN's Sustainable Development Goals into account in its investment strategies, in order to provide its expertise to regions where needs are greatest, by taking into account the region's economic, legal or technical realities. SUEZ has also developed a specific software program as well as dedicated training in order to support its managers in defining their priorities in terms of dialog and initiatives to optimize societal contributions to the regions. In accordance with the commitment made in its 2017-2021 Roadmap, SUEZ has systematically rolled out this methodology for its critical projects.

The Group encourages the use of innovative partnerships allowing players in the region to work together to build solutions that are adapted to the challenges and problems they face. With this in mind, since July 2016, the "SUEZ Collaborative Tour" has been setting up meetings between SUEZ employees and social and environmental entrepreneurs of a territory who are innovating in connection with our businesses. SUEZ seeks to co-construct innovative offers with these entrepreneurs through this tour, which create value in a region and beyond it. In the area of waste, in 2014, SUEZ created the Future of Waste (FoW) program in partnership with Makesense, a pioneer in citizen engagement. Following on from the Sustainable Development Goal 17, this program offers a space to citizens, entrepreneurs and experts on waste to meet up and work together to speed up the transition to more circular and solidarity economies. Today this community has 1,400 active members and has already organized more than 430 meetings, workshops and events in over 45 cities around the world. After spending 2017 dedicated to the construction sector (ArchiWaste campaign) and a 2018 campaign on waste management in the tourism and events sectors, FoW is focusing on food biowaste in 2019.

Increasing our impact through sponsorship

SUEZ intends to combine its expertise and the energy of its employees with that of civil society. This social commitment addresses a very strong ambition of Group employees that was expressed in the internal surveys.

In 1994, SUEZ employees founded the Aquassistance association. This 800-member network makes its volunteers' expertise and equipment available to support projects around the world. Aquassistance provides water, wastewater treatment and waste management assistance to vulnerable populations and provides support on development aid projects as well as in emergency situations and after emergencies.

Each year, for two weeks, the "Solidarity Together" program sees employees from all the Group's subsidiaries rally around community actions: in 2019, SUEZ employees joined forces to help people with disabilities in France, Australia, and Spain. Throughout the Group, employees can also organize their own waste collection event at a coastal area by going to the site suez4ocean.com: since 2017, 92 collections have been organized worldwide, bringing together 2,355 employees and collecting 68 metric tons of waste.

SUEZ focuses its sponsorship efforts on areas and populations that need them most and tries to distinguish them clearly from its contributions that fall under its commercial activities. As part of its public service contracts, SUEZ promotes and applies contractual solidarity mechanisms and decentralized cooperation initiatives when regulations and contract specifications allow. In terms of sponsorship, the Group has eight foundations and four associations spread out over four continents.

Access to drinking water
- Aquassistance Maroc
- Aquassistance
- Iberaquassistance
- Fondation SUEZ
- North America Foundation

Wastewater services
- Aquassistance
- Iberaquassistance
- Fondation SUEZ
- North America Foundation

Waste management
- Aquassistance
- Fondation SUEZ

Entrepreneurship
- Agbar Foundation
- Fundacion Aquae
- Fondation SUEZ

Volunteering and skills sponsorship
- Fondation SUEZ
- Fundacja SUEZ Jesteśmy z Tobą
- Fondation Terres d'Initiatives Solidaires
- Agbar Foundation
- Aquae Fundacion
- Fondation Lydec
- North America Foundation
- Aquassistance Maroc
- Aquassistance

Grants
- Fondation SUEZ
- Fundacja SUEZ Jesteśmy z Tobą
- Fondation Terres d'Initiatives Solidaires
- Agbar Foundation
- Aquae Fundacion
- Fondation Lydec
- Foundation India
- North America Foundation

Networking
- Fondation SUEZ
- Fondation Terres d'Initiatives Solidaires
- Fondation Lydec
- North America Foundation

Scholarship
- Aquae Fundacion
- Agbar Foundation

Field interventions
- Aquassistance
- Aquassistance Maroc

Backed by a EUR 3.3 million budget in 2019 and falling under the Group Roadmap, the SUEZ Foundation is managed by a Board of Directors that has 13 Directors, including one Group employee representative and six experts in the areas in which the foundation operates. With regard to access to essential services, the Foundation acts by supporting partner associations, and Aquassistance in particular, by boosting innovation with "SUEZ Initiatives Award at the *Institut de France*", or by training water and wastewater service operators in developing countries through the AgroParisTech Chair "SUEZ – General Management of urban water and wastewater services". Since its creation in 2009, this chair has trained nearly 160 people from four continents. The Foundation also takes action in France in the area of integration by supporting the employment and training of the most vulnerable people, and in the area of social cohesion, through education, culture and sports for young people in zones classified as priority under the town or city's policy. The Board of Directors approved 42 projects in 2019. In 2019, the Foundation devoted special efforts to projects that focused on refugees. Placing its initiatives under the UN's Sustainable Development Goals, the Foundation works with its partners to ensure that conditions exist for lasting improvements to the living standards of populations concerned by the projects, and that the results are sustainable.

Responsible lobbying

SUEZ maintains regular dialog with public institutions at the local, national, European and international levels. As part of its lobbying activities, the Group regularly communicates with French, European and international institutions, in particular through position statements, direct contact and participation in professional bodies, think tanks and events. The main issues addressed include such general-interest subjects as combating climate change, the efficient management of natural resources, and sustainable production and consumption. They also deal with subjects that have a more direct link to the day-to-day activities of the Group, such as management procedures and public procurement, legislation related to recycling and to waste recovery or drinking water and wastewater treatment.

The Group is registered as an official lobbyist with European institutions. It publishes the following information each year on the European Commission's website: the Group's centers of interest, its membership of associations linked with the European Union, the amounts and sources of finances received from institutions of the European Union, and the costs of activities for representing interests to European institutions (personnel and travel costs, memberships of professional associations, and external consultants). These costs amounted to between EUR 800,000 and EUR 899,000 in 2018.

Furthermore, in France, in accordance with the Sapin 2 law of December 9, 2016, the Group has been registered with the French High Authority for Transparency in Public Life (HATVP). Since April 2018, SUEZ has created an Annual Report of all its activities in representing interests to public institutions and of the related costs. A portion of the expenses related to these activities comes from SUEZ's memberships of associations and national federations. As a result, for 2018, the Group declared 9 actions for representation of interests and between EUR 700,000 and EUR 800,000 in expenditure for representation of interests.

Lastly, the Group recently updated its Charter on Ethical and Responsible Lobbying, in line with its Ethics Charter. This Charter, which contains nine sections and commitments for each employee or consultant involved in lobbying activities on the Group's behalf, is implemented as part of the Ethics Program described in section 3.2.4 of this document.

5.9.2.2.7 PROMOTING HUMAN RIGHTS ON THE VALUE CHAIN AND IN THE VIGILANCE PLAN

Having been committed for many years to human rights and respect of human dignity, SUEZ explicitly incorporates this challenge into Commitment No. 4 of its 2017-2021 Sustainable Development Roadmap. SUEZ's action principles in this regard are in line with international standards, in particular:

- the Universal Declaration of Human Rights and additional pacts;
- the International Labour Organization (ILO) conventions;
- the Charter of Fundamental Rights of the European Union;
- the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational companies;
- the United Nations Convention against Corruption.

SUEZ also participates in voluntary initiatives or working groups such as the Global Compact on Human Rights and is part of the *Entreprises pour les Droits de l'Homme* (EDH – Businesses for Human Rights) association.

Employees are asked to consider the impact of their actions and decisions on any person, to ensure that the integrity or dignity of said person is not compromised by a Group entity or one of its employees. The Group also strives to consistently defend human rights in sensitive situations, for example, by upholding the rules on protection of property in sensitive regions of the world. In this respect, all SUEZ employees must ensure that their words and actions are non-discriminatory, particularly in terms of age, gender, ethnic, social or cultural origin, religion, political or union affiliation, lifestyle choices, physical characteristics or disability.

Under the leadership of an internal "Vigilance and Human Rights" committee specifically established for this purpose, the Group adopted a human rights policy. This policy has been formalized by a policy statement outlining the conditions for implementing SUEZ's commitment. These principles have been discussed with stakeholders as part of their annual consultation and with staff representatives within the European Works Council.

Based on the United Nations Guiding Principles on Business and Human Rights, SUEZ's human rights approach is fully incorporated into its compliance management and ethical procedures. An assessment of the negative impacts on human rights that may be linked to the Group's activities has been carried out in connection with the drafting of its Vigilance Plan published in 2018 (see below). Identified in the first instance thanks to the development of an overall matrix of potential impacts linking the specific rights in question with the type of activity, the type of stakeholder affected and the level in the relevant supply chain, the impacts assessed cover both rights related to compliance with working conditions (non-discrimination, promotion of diversity, Health and Safety, social dialog) and ILO conventions (forced and illegal labor, child labor, etc.) as well as more specific issues, such as:

- the right to water and wastewater treatment: for several years, SUEZ has promoted the right to have access to water and wastewater treatment and has developed specific expertise to accomplish this in several parts of the world. Accordingly, SUEZ pays close attention to the most vulnerable people, especially in accordance with OECD principles on water governance;
- the protection of personal data: launched at the end of 2016, SUEZ's compliance program for the new European Regulation 2016/679 pertaining to the protection of personal data that entered into force on May 25, 2018 (GDPR) fully meets the Group's commitments, especially those included in its Roadmap and concerning respect for Human Rights and adopting higher standards of protection, particularly regarding the handling of employees' and end customers' personal data.

An action plan aiming to strengthen the existing measures to mitigate and prevent the risk of human rights infringements that could occur in connection with the Group's activities and supply chain has been established and was implemented in 2018. This plan is based on two pillars:

- informing and training staff in best practices to adopt in the event of a risk of human rights violation. For instance: factsheets providing information on the main points of vigilance to observe concerning human rights in certain countries are sent to the managers of teams operating in these countries; internal events are organized to raise awareness in this area among staff, with partners specializing in the field, such as Vigeo and EDH and other business partners. Inspired by the collaborative work of EDH member companies, an e-learning module for employees was tailored to SUEZ's businesses, its areas of operation and the main risks identified;

- strengthening of qualification, control and support processes for suppliers and subcontractors based on supplier-specific risk mapping by the Procurement Department, which coordinates relations and negotiations with the Group's strategic suppliers and which specifically ensures that they undertake to respect the principles of sustainable development and human rights and to comply with SUEZ's ethical rules.

Vigilance Plan

SUEZ is convinced that the businesses can count themselves as real contributors to the development and transformation of our societies, and has always conducted its business activities with a view to increasing its contribution to the common good, thereby seeking to maximize the economic, social and environmental benefits generated by its presence in different regions. Building on the Group's long-standing actions and commitments to promote human rights, the health and safety of individuals and the protection of the environment, in 2017, SUEZ drafted and published its Vigilance Plan in accordance with the provisions of Law 2017-399 of March 27, 2017 relating to the duty of vigilance of parent companies and contractors. The goals of this plan are twofold: to provide a broader understanding of the impacts generated by the Group's activities, and to implement the most appropriate means to allow it to maximize its positive impacts, while also preventing and mitigating its negative impacts.

In March 2018, the Vigilance Plan was subject to a consultation with external experts and stakeholders. Discussions focused on ways to audit and monitor the progress of suppliers and have led SUEZ to assess opportunities to pool efforts with other companies and organizations located near one another. In addition to mandatory dialog on the ethics whistle-blowing system, the Vigilance Plan was also presented to staff representative bodies within the European Works Council during a meeting of its Secretariat in Paris in March 2018 and its plenary meeting on July 5, 2018 in Budapest.

1) Scope and composition of the plan

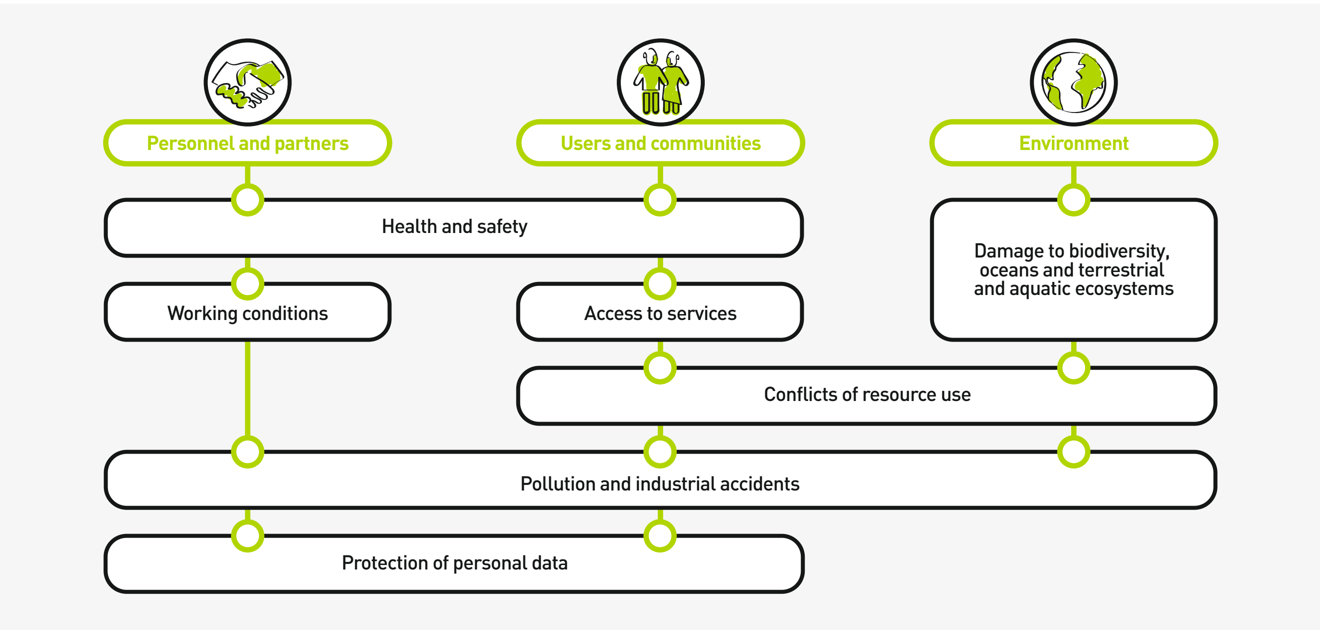
This Vigilance Plan is intended to identify and prevent the risk of serious harm to the environment, human rights and fundamental freedoms as well as to the health and safety of individuals arising from the Group's activities or those of subcontractors and suppliers when they are linked to the Group's activities. This plan applies for the whole Group and its subsidiaries.

In line with the United Nations Guiding Principles on Business and Human Rights, this plan covers:

- a mapping of the risks identified, analyzed and prioritized and the methodology used;
- the procedures for regularly evaluating these risks;
- the actions taken by the Group to prevent and mitigate these risks;
- the alert and report collection mechanism for the existence or development of risks;
- the arrangements for steering and monitoring the plan and the measures implemented.

2) Risk mapping [1]

By mapping the risks of serious violations of human rights and fundamental freedoms, environment, health and safety, the Group takes into account two main factors, represented by the risks inherent in the nature of its activities, and the risks inherent to the countries in which it operates. Additional work to identify and map the risks related to suppliers' and subcontractors' activities, taking the same factors into account, back up this mapping. Work to identify and classify risks was done jointly by the Sustainable Development, Human Resources, Health and Safety, and Risk & Investments Departments, under the control of the "Internal Steering Committee on Human Rights and Duty of Vigilance". On the basis of interviews conducted with managers, risks were subject to an internal assessment aimed at describing their critical nature across the scope of the Group's activities, and then prioritized, culminating in the following mapping:



(1) In a context of climate change, certain risks identified in the Vigilance Plan are likely to be aggravated, in particular conflicts of use. SUEZ has made ambitious commitments to reduce its greenhouse gas emissions and enable its customers to prevent and mitigate risks related to climate change. These actions are described in section 5.9.2.2.4 of this document.

3) Risk monitoring and assessment

The procedures for monitoring and assessing the risks to human rights and fundamental freedoms, health, safety, and the environment are developed and updated in line with the Company's integrated risk policy. Under the supervision of the Chief Risk Officer, these risks are assessed each year by the Risk Officers who, at the level of the various subsidiaries, are in charge of rolling out the assessment methods for said risks, in coordination with the relevant operational departments, specifically Human Resources, health and safety, Sustainable Development, Innovation and Industrial Performance and Procurement. Said risks are also incorporated by the Internal Audit, Risks and Investments Department in the development of its annual audit plan.

4) Risk management, prevention and mitigation plans

The risks faced by Group entities depend directly on the nature of their activities and the geographical, political and legal context in which they are performed. Each of them, taking into account the Group's internal policies, sets out the measures which seem to it to be the most suited to the challenges it faces and is supported in this task by the operational departments. Three cross-departmental policies form the foundation of the plans for managing, preventing and mitigating the risks of violations of human rights and fundamental freedoms and of damage to health, safety and the environment:

- the Group's Ethics policy sets out the fundamental principles and ethical values upheld by SUEZ and defines the roll-out of measures that make it possible to ensure that those principles and values are observed in all its activities. Further information on the Ethics policy and the Board of Directors' CSR, Innovation, Ethics, Water, and Sustainable Planet Committee can be found in section 3.2.4 "Ethics Program" and in chapter 12.1 "Composition of governance and management bodies";
- the Group's human rights policy that defines its responsibility and the conditions for implementing an effective due diligence process; SUEZ refers to the recognized international reference frameworks and, in particular, to the United Nations Guiding Principles on Business and Human Rights;
- the Group's Responsible Procurement policy, the main elements of which are described in detail below.

The Responsible Procurement policy

The Group believes that supporting its business partners in including more Corporate Social Responsibility challenges constitutes a major lever in its overall performance. As a result, the Responsible Procurement policy delivers on this willingness to extend the Group's ethics culture to all the stakeholders in the procurement value chain. As a framework for action that is common to all Group entities, this policy is based on complementary tools and procedures with a single objective: to create environmental, social and economic value through business relationships. Managed by the Group's Procurement Department and Sustainable Development Department, this policy is rolled out within the subsidiaries by a network of Responsible Procurement Officers. The procedure for monitoring and supporting the Group's suppliers is based on a number of complementary measures:

- a supplier qualification process incorporating criteria relating to the promotion of human rights and the respect of fundamental freedoms, the prevention of health and safety risks, and the management of environmental risks;
- the inclusion of CSR clauses in contracts with suppliers, whereby those suppliers undertake to respect the Ethics Charter and the ethical, social and environmental principles upheld by the Group;
- support measures to help the Group's suppliers to improve their CSR practices, such as providing access to the SUEZ Ethics practical guide;
- the implementation of measures for supervising and auditing suppliers with a deemed high level of risk.

As part of the formalization of the Group's Vigilance Plan, the Sustainable Development Department and the Procurement Department have jointly developed a risk mapping system relating specifically to the purchasing process in order to reinforce the mechanisms for managing the existing risks with regard to human rights, health and safety, and the environment. Based on the major purchasing categories and the primary risks identified when drawing up the Vigilance Plan, this mapping system has been drawn up on the basis of links between the criteria associated with the purchasing sectors (conditions of production or for executing a delivery or a service, risks associated with the delivery or inherent in its use) and the country of origin of the delivery or of provision of the service, using the mapping of risks by country as a basis. This framework for assessing the gross risk of suppliers helps the Group define the appropriate level of supervision and support by establishing priorities and pooling these efforts with other companies or organizations when it is worthwhile and possible.

Sector-based action plans and policies

In addition to these cross-disciplinary policies, the Group's operational departments have developed sector-based policies and action plans to mitigate and prevent the risks that may arise in the course of the Group's business activities or those of its business partners. The following table lists these risks and indicates the relevant chapters of this Universal Registration Document.

Subject/disclosure	Corresponding section(s) and paragraph(s)
Health and Safety	
► Health and Safety conditions	► 15.1.5 and 15.2.2, paragraph on "Workplace safety" and 5.9.2.2.8
► review of the agreements signed with trade unions	► 15.1.5 and 15.2.4
► accidents in the workplace, including their frequency and severity, as well as occupational illnesses	► 15.2.2, paragraph on "Workplace safety"
Management of environmental and industrial risks	► 5.9.2.2.1
Protection of biodiversity and ecosystems	► 5.9.2.2.5
Protection of personal data	► 3.2.3 and 5.9.2.2.7
Compliance with regard to working conditions and the combating of discrimination	
► organization of working time	► 15.2.2, paragraph on "Working hours"
► organization of social dialog and review of collective bargaining agreements	► 15.1.3, paragraph on "A constructive social dialog" and 15.2.4
► non-discrimination	► 15.1.3, 15.1.4, 15.2.1, paragraphs on "Gender breakdown" and paragraph 15.2.3 "Training"
Promotion of human rights and respect for fundamental freedoms	► 5.9.2.2.7
Conflicts of resource usage	► 3.1.3, paragraph on "Risks related to service continuity"
Access to services	► 5.9.2.2.6, paragraph on "Developing customized solutions"

5) Alert escalation systems

In accordance with legal provisions on the duty of vigilance and the requirements of Decree 2017-564 of April 19, 2017 made in accordance with Article 8 of the Sapin 2 law applicable since January 1, 2018, SUEZ has two types of complementary systems for alert escalation and report collection that cover all non-compliance risks with respect to violations of human rights and fundamental freedoms and damage to health and safety and the environment.

- Firstly, the email address ethics@SUEZ.com, which can be found in the Ethics section of the SUEZ website, allows any question, request for information or alert to be escalated directly to the Group's Ethics Officer and the Ethics and Compliance Director, who will analyze the information once it has been received and process it by implementing the most appropriate internal procedures.
- Secondly, if they become aware of a potential breach of the ethical principles, the Group's employees are encouraged to discuss it with their line manager, other appropriate managers (Human Resources, Safety, Legal, etc.), an employee representative, the Ethics Officer of their entity, or the Group's Ethics Officer. Any discussions in this context will remain confidential and no penalty may be applied to any employees who, in good faith, take the initiative to share their concerns on matters of ethics or compliance.

This system was subject to a specific internal communication as part of the implementation of the Vigilance Plan. It can also be accessed by external stakeholders on the Group's website.

SUEZ and a significant number of its subsidiaries have set up ethics-related email addresses or telephone hotlines so that employees and third parties can easily seek the support of Ethics Officers.

Lastly, to help manage its reputation risk, SUEZ monitors the media to manage and prevent controversies related to its businesses or its operations around the world. A "controversies" committee includes the Sustainable Development Department, the Communications Department, the Institutional Relations Department, the Ethics and Compliance Department and the Internal Audit, Risks and Investment Department. It monitors ongoing controversies and endeavors to prevent future controversies by monitoring the faintest of signals in the media, on social networks, through the Social Room system set up in 2019, or within the ecosystems in which the Group operates.

6) Steering and governance of the plan

The steering of this Vigilance Plan is carried out by the General Secretary of the Group, in coordination with the following operational departments:

- Human Resources;
- Health and Safety;
- Sustainable development;
- Innovation and Industrial Performance;
- Procurement;
- Risk and Investments;
- Internal Audit and Transformation;
- Ethics and Compliance;
- Security.

The measures derived from this plan are implemented by the Business Units of the Group with the support of their operational departments. Each year, the results of implementing the actions in this plan are presented to the CSR, Innovation, Ethics, Water, and Sustainable Planet Committee of the SUEZ Board of Directors.

7) Reporting

Every year, SUEZ reports on the monitoring and implementation of the plan in its Universal Registration Document. The risk mapping is similarly republished each year, taking into account any changes. Many monitoring indicators for the sector-based action plans are in force within the Group, particularly with respect to employee relations, health and safety, and the management of environmental and industrial risks (sections 15.2.2, 15.2.4, 5.9.2.2.1 and 5.9.3).

The Group publishes a special report on the implementation of its Vigilance Plan every year in its Universal Registration Document (see section "Plan implementation for fiscal year 2019" below). It includes:

- raising awareness and training employees on respecting human rights and fundamental freedoms;
- an in-depth look at and update of the risk mapping, taking into account alerts received and controversies identified;
- improvement plans that result from them and their impacts.

8) Plan implementation for fiscal year 2019

In 2018, the extension of the risk mapping, especially for procurement, highlighted the following priorities that were confirmed by the 2019 review undertaken by the Risk Officers:

- at Group level, these risks are traffic accidents (section 5.9.2.2.8) and protection of personal data in the event of a cyber-attack;
- for procurement, the categories most at risk are chemical products, construction, and managing sludge. For chemical products, the Group gets most of its supplies from international market leaders, and SUEZ analyzes their due diligence process. Other suppliers from this sector will be reviewed as a priority depending on country risk;
- from an operational standpoint, SUEZ Africa, Middle East, India business unit is more specifically exposed to discrimination risk and freedom of assembly risk and it has bolstered its vigilance in the area of health and safety and living standards of subcontractors on its work sites.

Strengthening of the Health and Safety policy

The Group reviewed its Health and Safety policy in order to achieve the "Zero serious and fatal accidents" objective. The resulting action plan applies to all the Group's operational subsidiaries *via* an annual Health and Safety Objectives Contract.

In addition, there has been a management plan in place for major risk management since 2016. Actions in 2019 were concentrated on the risk of pedestrian-vehicle collisions, trench shoring, the chlorine gas risk, and the creation of training modules.

These actions are detailed in section 5.9.2.2.8 of the Non-Financial Performance Statement.

Protection of personal data

Since May 2018, SUEZ has applied a Personal Data Protection Policy[1] with the addition of data protection governance. For compliance with GDPR and especially for the obligation to comply responsibly over the long-term, SUEZ applied its Personal Data Protection compliance plan in accordance with a company-specific GDPR reference framework.

This GDPR reference framework, inspired by best practices (CNIL IT governance and liberty label)[2], is broken down in the form of the following measures:

- formation of the Data Protection Committee;
- appointment of a Data Protection Officers (DPO) and representative (GDPR Coordinators) network;
- implementation of processing records and action plans relating to processing compliance;
- adoption of procedures to analyze GDPR compliance or analyze the impact of protecting personal data (PIA) in projects (methods for identifying, preventing and mitigating risks to guarantee respect for people's rights, setting up more stringent security measures in the event of residual risks);
- supervision of contractual relationships with subcontractors that process personal data on the Group's behalf;
- adoption of policies in specific areas, such as instructions pertaining to the exercise of people's rights and the management of security incidents (contributing to strengthening cyber risk prevention).

In the second half of 2019, e-learning modules were set up to promote acculturation of data protection; these modules are available to 80,000 employees and are accompanied by in-class training.

SUEZ has ensured compliance with GDPR by setting up a GDPR structure defined by Governance. This structure is based on a Data Protection Committee at the SUEZ Group level that meets quarterly, and a DPO network that includes around a dozen DPOs. To ensure consistent application of the program in Europe, a similar structure has been rolled out in the same way throughout the Business Units, taking into account each location's specific circumstances. Resources are directly allocated to the program. In order to measure the effectiveness of measures rolled out under the program, the Group DPO has defined a Personal Data Protection process based on 12 monitoring indicators that have been included in the Group's internal control processes since 2019 (among which is the number of data violations that required notification of a control authority). In order to corroborate these indicators and test the effective implementation of the measures documented as part of internal control, the Group's internal audit plan includes GDPR compliance reviews, in addition to regular cyber audits. These audits are backed by monitoring audits as part of continual improvement.

At subsidiary level, SUEZ Eau France, which manages more than four million public water and wastewater service customer users *via* approximately 2,066 delegation of public service contracts and 2,484 service contracts, has made personal data protection a key component of its business model. Other Group entities are pursuing similar objectives. As a result, in October 2018, R&R France launched a national action plan dedicated to improving data quality, managed by its "Digital & Customer Experience" Business Line. This action plan, which aims to "better collect, process and use the data" throughout its life cycle, includes the protection of personal data and thereby ensures the Group complies with its regulatory obligations. Internationally, for example, SUEZ North America also evaluates its policy and its control framework to ensure they comply with the new national laws on data confidentiality and security, such as the New York Privacy Act. For SUEZ Asia, the main actions in 2019 were focused on continental China and the Hong Kong and Macau Special Administrative Regions, where there are many employees. An Individual Declaration of Personal Information Collection has been provided to employees in the controlled entities for their acknowledgment, reiterating the purpose

(1) See SUEZ's institutional site: www.suez.com
(2) Ruling 2017-219 of July 13, 2017 relating to amending the reference framework for issuing labels on governance procedures to ensure data protection.

and framework for collection, use and disclosure of personal data by the data controllers, as well as the rights of employees regarding data protection laws. Contractual commitments of sub-contractors responsible for payroll management for local employees have also been reviewed in order to ensure personal data protection obligations are respected.

The Group's Data Roadmap, produced by SUEZ's Chief Data Officer, takes advantage of the opportunities offered by GDPR to roll out an extensive data quality improvement program at SUEZ.

In addition, in 2018, SUEZ signed a contract with Bitsight to assess the security level of its main suppliers' information systems. The Procurement Department has integrated cyber security assessment into its supplier qualification process and a specific audit is provided for in the contract models. Within this scope, in 2019, SUEZ North America launched a due diligence process evaluating the security and confidentiality of data held by potential suppliers who have access to the data of public service users and to the data of employees.

Reflection on the controversies and risks to human rights relating to plastics management

In 2019, SUEZ consulted stakeholders on the dilemmas relating to plastics management; risks linked to human rights may exist, depending on the country into which secondary raw materials that the Group produces and sells will be reused. Social monitoring has been launched for these customers.

5.9.2.2.8 PROTECTION OF HEALTH AND SAFETY FOR ALL

Strengthening of the Health and Safety policy

To revitalize the Health and Safety process and to be consistent with the Shaping SUEZ 2030 corporate vision, which has inspired the entire company, the new Chief Executive Officer of SUEZ has reviewed and signed SUEZ's Health and Safety policy. This policy aims to meet the "Zero serious and fatal accidents" goal, create a fair and inclusive Health and Safety culture and inspire employees to care more about everyone's well-being. The employee survey, conducted in July 2019 as part of the Shaping SUEZ 2030 strategic plan, also highlighted how much people think about safety and how well safety procedures are rolled out throughout the Company. The survey confirmed the results of the global engagement survey from May 2018: more than 80% of employees had a positive opinion of the Group's Health and Safety approach. The Group's action plan is prepared by the Health and Safety Department and its network, discussed in the Performance Management Committee and in the Health and Safety and Human Resources Steering Committees, then presented to the Board of Directors' CSR, Ethics, Innovation, Water and Sustainable Planet Committee. It is then distributed to all the Group's operational subsidiaries *via* an annual Health and Safety Contract.

These Health and Safety objectives contracts are a particularly structured and efficient system that SUEZ has had in effect for four years. Not only does their roll-out align with corporate objectives, but they also motivate the entire company. This "Health and Safety Objectives Contract" is established with the management of each subsidiary at the beginning of the year and is signed with the Group Health and Safety Department. Points of contact in the Corporate Health and Safety team follow through on this contract throughout the year, then at the end of the year, they perform an in-depth review to ensure actions have been implemented and targets achieved. Its consistent roll-out is included in the scorecards, which significantly impact the variable portion of all Executive Committee members' compensation (multiplying factor of 0.8 to 1.2 of the total bonus) and more broadly, managers of the Group. The way SUEZ calculates the variable portion of the new CEO's compensation was also revised in 2019 to make health and safety performance an even larger factor. In 2019, a specific objectives contract was drawn up for the new WTS business unit as part of its integration.

During the Shaping SUEZ 2030 plan, the Health and Safety network, with the managers and social partners, in particular as part of the analysis, formalized its new Roadmap for 2020-2023 and the objective set for 2030, to put Health and Safety and well-being at the heart of the company's actions and values. This will extend and strengthen the 2017-21 Health and Safety Roadmap. The 2020 Objectives Contracts have been amended accordingly, as have the underlying actions of SUEZ's Health and Safety team.

Each subsidiary implements its own system to verify and audit if its actions are effective and compliant, whether it is specifically certified in Health and Safety or not. For instance, in France, the main Recycling and Recovery business unit sites underwent an assessment using a 100-question matrix focusing on health, safety, environment and industrial risks. More than 800 sites were assessed in 2018 and 2019.

Regarding the Group's Health and Safety Department audit program, in 2019, 11 Health and Safety audits were carried out to assess the level of maturity of the Health and Safety Management system and the level of control of Major Risks within the subsidiaries. These audits are based on a Group reference framework that has been established gradually over the course of some ten years' continuous effort. This reference framework applies when local regulations do not exist or fall short of the Group's standards. The results of these audits show an increase in management leadership relating to Health and Safety, a more competent Health and Safety sector, a more clear-cut definition of roles and responsibilities, improved skills on managing major risks and more employee representative involvement. These audits also assessed the progress of action plans that were developed as a follow up to three out of four of the Group's fatal accidents in 2018.

Lastly, in 2018, the Health and Safety Department set up proactive performance indicators on top of existing reactive audits and indicators (frequency rate, FR and severity rate, SR) to assess the subsidiaries' level of maturity with regard to their safety culture, and in particular, experience acquired from analyzing accidents and near accidents, and especially events with high potential severity, which undergo an in-depth debriefing, discussions on best practices as well as managers' visible engagement through management safety visits.

Health and Safety requirements and support concern subcontractors and temporary workers. The procedures require their selection, orientation, support and assessment to include strict Health and Safety criteria. Regular meetings take place so we can all improve. In 2019, in line with the Group's Vigilance Plan, the Group made significant efforts mapping subcontractors to assess the most at-risk subcontractors according to country and business, and prioritizing the Group's actions.

As part of its construction operations, SUEZ pays very close attention in the choice for local and international partners and/or subcontractors, by ensuring:

- their qualifications/certifications if they are not already in SUEZ's list of partners/subcontractors, based on criteria defined and reviewed regularly;
- they are supervised throughout the project to verify they comply with local regulations as well as SUEZ's rules and standards. This supervision is performed by Health and Safety teams *via* regular worksite visits or audit programs as well as by any person in the Group or by the "Infrastructure Treatment" team's Center for Construction Expertise. All SUEZ staff are regularly trained and made aware of specific risks. At SUEZ, "We care about safety everywhere, all the time, with and for everyone";
- lastly, an overall service assessment is conducted at the end of a construction project to determine the general level of service in terms of Health and Safety, to be able to take advantage of feedback and share it with the subcontractor so they can make Health and Safety improvements;
- SUEZ also pays additional attention beyond monitoring premises and worksites for employees of subcontractors that live in large-scale site accommodation next to worksites (particularly in Africa, India and the Middle East) and monitors their living conditions at these sites. An audit matrix of such site accommodation was created and rolled out over 2018 and 2019, with each subject to monitoring by Health and Safety, Human Resources, purchasing as well as operations teams.

In the Water France BU, training for managers and buyers in how to manage third-party companies' Health and Safety practices was rolled out in 2018 and 2019 with nearly 600 people trained. A recertification process for subcontractors working on the networks was initiated in 2019 with initial results showing a 30% reduction in the pool of subcontractors, due to stricter business and Health and Safety requirements. Certain companies went through a specific support process.

At Lydec, in Morocco, our very high level of maturity with regard to subcontractor management was recognized by the Moroccan Minister of Labor with an award for being a responsible company committed to promoting a culture of prevention in Morocco on April 13, 2019, during the International Preventica trade show. The year 2019 was dedicated to overhauling the reference framework for assessing subcontractors, to better take into account Duty of Vigilance requirements with stricter verification of employment, Health and Safety obligations of service providers as well as requirements related to anti-corruption and prevention measures, which Lydec was certified for under ISO 37001 in December 2018.

Regarding temporary workers, 2019 was characterized by the finalization of the call for tenders aiming to obtain a global offer with more limited partners selected also by taking into account SUEZ's Health and Safety requirements. The Group is now able to regularly and precisely monitor frequency and severity rates of temporary staff achieved, and any progress made in the various countries where SUEZ operates, in a more consistent way. Temporary Staffing Company Health and Safety networks are supporting the Business Units in analyzing risks and improving their areas deemed critical.

For the Group, an integrated safety culture that controls risks well is based on three pillars: human and organizational factors, the technical aspect of safety, and safety management systems. The technical aspect and safety management systems are integrated into the Business Units. The subsidiaries also reviewed their management systems while progressively undergoing ISO 45001 certifications. The percentage of employees covered by dedicated safety certification continues to increase and will reach 43% at the end of 2019 (52% outside France).

Monitoring of the major risk management plan

In 2016, the Group developed a new approach to major risk oversight with a "Zero serious and fatal accidents" ambition. The work began with pedestrian-vehicle collision risk at the sites. The initiative, which was initially launched for Recycling and Recovery (R&R) business activities in Europe, was expanded to all the Group's business activities across the world in 2017. The first action is to identify, indicate and organize access to "Restricted Access Areas" (ZARs) on our sites. These ZARs are areas on the sites that have a proven higher risk for pedestrians due to a constant or near-constant presence of moving vehicles. A set of technical, organizational and human measures have now been taken to strictly control access to these areas to make them safer. The ZAR initiative resulted in an audit being launched of all the Group's R&R activities in 2018, and then a follow-up audit was launched in 2019. Finally, in accordance with the commitments of the Group's Sustainable Development Roadmap, an indicator has been set up to monitor the control of these areas. We have come a long way: out of more than 1,600 ZARs listed at SUEZ, 78% now have technical, organizational and human measures put in place at the end of 2019.

In 2018 and 2019, in addition to the continued roll-out of the ZAR system, all subsidiaries in the R&R activity were asked to focus on the risk of pedestrian-vehicle collisions outside the sites, subsidiaries in the water sector were asked to improve on working at heights and the two businesses were asked to work on the issue of lockouts/shut-offs (for electrical, mechanical, pneumatic and hydraulic systems, etc.) by sharing best practices. In addition, the attention paid to the quality of trench shoring remains a major concern with regard to the subcontractors, especially in countries where local on-the-job safety requirements are not as stringent as the Group's rules. On water treatment sites, we will continue to rigorously monitor the gaseous chlorine risk to employees and persons living in the vicinity of our plants. Fatal accidents in 2018 and 2019 were primarily collisions between collection trucks and pedestrians (third parties). Managing this collision risk remains the priority in 2019 with a focus on human and organizational factors in collection operations, road safety training for truck drivers, and installing digital tools to help drivers better manage road risks and avoid fatal accidents. In 2019, SUEZ created virtual reality training modules for driving waste collection vehicles and appropriate behavior in ZARs, which are currently being rolled out after receiving strong approval from operators at the initial sites, added to the modules for electrical system lock-outs/shut-offs created in 2018.

Note also that as part of our increased work on road-related risk, a first entity (Middle East) certified its business under ISO 39001 (for road traffic safety management) and a second one (R&R Morocco) is set to obtain it in early 2020. These measures made significant progress on the three pillars on road-related risk. The Group therefore created an audit matrix based on this standard and our internal reference framework, and a first entity (R&R Belgium) was audited in 2019.

5.9.2.2.9 FIGHTING CORRUPTION

As part of the Ethics Program set up by the Group described in section 3.2.4 of the Universal Registration Document, specific anti-corruption rules are set forth in the Ethics Guide for business relationships which can be consulted by all employees and is available on the Group website.

Furthermore, procedures to manage ethical risks, particularly corruption risk, have been defined and verification measures are in place:

- a specific procedure for finalizing contracts with commercial or institutional consultants. This defines the due diligence measures to be undertaken prior to finalizing these contracts and the prior approval mechanisms;
- due diligence measures are implemented in the selection of co-investors, co-contractors and subcontractors;
- a procedure for patronage and sponsorship initiatives defines the principles applicable in this area and the mechanisms for prior validation;
- an Ethical and Responsible Lobbying Charter has been drawn up to serve as a reference for employees who are required to represent the Group's interests.

In line with the requirements of the Sapin 2 law, a corruption risk mapping was drafted in 2017. In 2019, this mapping was updated again. It was validated by the Group's Executive Committee and then presented to the Board of Directors' CSR, Innovation, Ethics, Water, and Sustainable Planet Committee.

Under the responsibility of the Group's Ethics Officer and their network of Ethics Officers (17 Ethics Officers in "first-tier" entities and 75 people including local Ethics Officers), in-class training and e-learning modules are rolled out on a regular basis, in order to strengthen ethical risk prevention, in particular through good knowledge of anti-corruption and competition rules. This roll-out is based on training programs defined upstream, with priority given to training the groups most exposed to risks.

As a result, during 2019, approximately 9,000 employees were trained in ethical issues and 5,000 of them were specifically trained in anti-corruption rules (mainly populations identified as being at risk of exposure).

SUEZ's Ethics and Anti-corruption Program is also integrated into the Group's internal control program.

Lastly, Lydec, the Group's Moroccan subsidiary, received its ISO 37001 certification in 2019, relating to the fight against corruption, this certification had already been received by Aguas Andinas, the Chilean subsidiary of the Group, certified in 2017, and the Italian subsidiary Trattamento Acque, certified in 2018.

5.9.2.2.10 MAINTAINING KEY COMPETENCIES IN THE GROUP'S EMPLOYEES

SUEZ's human capital plan, in line with the ambitions of its HR Roadmap 2023, is based on five objectives that contribute to maintaining key competencies in the Group's employees:

- rolling out a winning corporate culture, preparing new ways to work and developing the leadership;
- developing expertise in businesses;
- supporting SUEZ's digital revolution;
- taking care of employees;
- providing competitive and effective HR services.

In particular, specific action plans are in place for:

- Talent development, with a potential talent identification process that is integrated with local management as closely as possible; basing this on an HRIS that has already been rolled out for more than 80,000 Group employees. The Talents identified are divided into three categories: Global Talents, BU Talents (57% of talents are in these two categories) and Emerging Talents (43% of talents). Individuals defined as Talents are reviewed through career-specific monitoring at the Group level. In 2019, SUEZ identified 1,400 talents, 45% of whom are women. In order to develop these Talents, SUEZ makes various development programs available to all entities through the SUEZ Academy, such as the Global Mind Opener, an international program to discover digital or Let's Talk digital, a personalized training program for discovering and understanding the concepts related to new technologies, their uses and impacts on society and the professional world;
- career development of Experts. Like Talents, People Reviews enable Technical Experts to be identified, in line with the key areas of expertise defined by the Group. As a result, in 2019, SUEZ defined 3 new areas of expertise related to the air, agriculture and data markets, which supplement the 25 existing Group areas;
- generational renewal: SUEZ plans to hire more young graduates to help create age diversity and acquire new skills in line with changes in the business. In 2019, 2,500 young people worked in various Group entities through internships, part-time learning contracts or French international internships (VIE). In order to attract and develop these profiles, the Group offers Graduate Programs in various countries (France, United States, Asia, etc.) for talented young people who are passionate about sustainable resource management. These Graduate Programs are true programs for excellence that aim to support students in higher education to management or expert-level positions, offering them opportunities to join, grow and advance within the Group;
- the acquisition and development of new commercial, digital or industrial market-related skills. In order to meet the challenges of industrial markets, SUEZ continues to develop the skills of its sales people through dedicated training programs. SUEZ also encourages cross selling by setting up incentive measures as well as by synergies between the various Group businesses and teams, thanks to our robust internal mobility policy.

SUEZ also prioritizes developing digital expertise to meet the challenges related to transformation, process and business automation and the emergence of new markets, which impact all of SUEZ's businesses.

In fact, SUEZ is actively preparing for transition by including new positions in our recruiting plan, such as Data Analyst and Data Scientist, whose role is to analyze data streams to optimize and monitor them in real time.

Supporting employees when their position goes digital is one of the Group's priorities. To do this, SUEZ has developed specific dedicated training for employees to teach them how their job is changing and equip them with the skills they will need.

These specific programs are supported more generally by a strengthening of professional training and internal mobility policies within the Group. In 2019, 69.4% of the Group's employees received training.

All of the policies and action plans summarized above are detailed in section 15.1.3 "Our Human Resources strategy" of this Universal Registration Document.

5.9.3 Key performance indicators associated with the main challenges identified as part of the Non-Financial Performance Statement

5.9.3.1 Environmental challenges

	Municipal and industrial customers			Employees			Regions			Consumers			Environmental health		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Optimized water and waste management															
Waste recoverd (%) [a] – (XXX)	56.0	53.8	50.0												
Recycled plastic production (metric tons)	562,000	525,000	400,950												
Bottom ash recovered (%) – (XXX)	na	77.54	67.1												
Technical performance from drinking water distribution (XXX)										80.1	79.7	79.8			
Energy produced/energy consumption ratio (primary and secondary sources) from activities (%) – (XXX)													11.4	9.5	9.7
Making the water supply safer															
Wastewater reused (%)	21.5	22.8	25.4												
Drinking water production sites and wastewater treatment plants located in water risk area [b]							ND	9.0	ND						
Fighting climate change															
Emissions avoided by SUEZ customers (KteqCO_2) [c]	9,374	10,036	10,218												
Production of renewable energy (GWh) – (XXX)							6,700	7,603	8,668						
Direct GHG emissions (KteqCO_2) [c] – (XXX)													6,048	6,789	6,682
Indirect GHG emissions (KteqCO_2) [c] – (XXX)													2,478	2,479	2,787
Consumption of primary and secondary energy (MWh) – (XXX)													11,373,225	15,199,224	17,286,513
Protection of biodiversity and eco-systems															
Percentage of priority sites with a biodiversity action plan deployed (%)													15.2	34.1	39.8

(XXX) Indicator verified with reasonable assurance (see sections 5.9.2, 5.9.3. and chapter 15.2.).

(a) Formula used to calculate the indicator: quantity of waste recovered (in the form of matter of energy, excluding inert waste and biogas recovery on landfills)/sum of waste recovered and disposed waste – Value of 69.0% on the European scope.

(b) Calculation made using the World Resources Institute Aqueduct tool that identifies water risk sites using several criteria (water stress, existence of reservoirs/upstream dams, condition of groundwater, interannual and seasonal variability, frequency of floods, severity of drought episodes). This result was obtained by filtering high-risk or extremely high-risk facilities using the overall risk indicator (consolidating the different risk criteria). The analysis was conducted on a total of 1,996 sites, including 1,060 wastewater treatment sites and 936 drinking water and desalination production sites. A total of 649 facilities were excluded from the analysis due to GPS coordinate data being temporarily unavailable for some sites or due to certain characteristics being unavailable for some regions in the Aqueduct tool.

(c) Since fiscal year 2017, the calculation of greenhouse gas emissions has been based on the recommendations of the 5th IPCC's report, including a Global Warming Potential equal to 28 for methane. The Group's carbon profile was calculated in 2019 taking into account a methodological adjustment consistent with the Group's activities: taking into account the "combustion" emission factor alone in the greenhouse gas emissions produced and avoided related to energy consumption, with upstream and downstream parts falling under scope 3. Are also included in this indicator the emissions related to subcontractors' activities integrated into the value chain of SUEZ activities (e.g waste collection and transport).

5.9.3.2 Social and societal challenges

	Municipal and Industrial Customers			Employees			Regions			Consumers			Environmental health		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Social and societal contribution to the Group's activity															
% of women in management – (XXX)				27.4	27.6	28.2									
% of employees covered under a social dialog system				91.3	86.7	86.0									
Promotion of human rights and vigilance duty															
% of supplier contracts that include CSR							40	55 [a]	56 [a]						
Protection of Health and Safety for all															
Number of fatal accidents involving employees – (XXX)				4	4	2									
Frequency rate of workplace accidents – water – (XXX)				4.74	4.53	4.14									
Frequency rate of workplace accidents – waste – (XXX)				11.98	12.38	10.27									
Fighting corruption															
Number of employees trained in anti-corruption rules [b]				ND	3,300	5,000									
Maintenance of key skills among the Group's employees															
% of trained employees [c] – (XXX)				67.2	69.3	69.4									

(XXX) Indicator verified with reasonable assurance (see sections 5.9.2, 5.9.3 and chapter 15.2).

(a) Excluding WTS.
(b) The indicator "Trained employees" is verified with reasonable assurance.
(c) For 2019: WTS data for January – September 2019 only.

Remarks on the most significant changes in key performance indicators

- **Production of renewable energy**

The significant increase in this production is mainly due to the development of the Group's Energy from Waste business activity, particularly in the United Kingdom (Greater Manchester contract in 2019), as well as the recognition since 2019 of biomethane produced and injected into the natural gas network from landfills and methanization units.

- **Direct and indirect greenhouse gas emissions/avoided emissions**

The breakdown of emissions by type of activity as well as the methodological assumptions adopted are presented in section 5.9.2.2.4 of the Non-Financial Performance Statement, paragraph "the Group's carbon profile".

- **Number of employees trained in anti-corruption rules**

The updating of the corruption risk mapping in 2019, as well as the roll-out of the Vigilance Plan, has been accompanied by an intensification of training programs, with priority given to the populations most exposed to the risks.

5.9.4 Annual reporting methodology

5.9.4.1 General principles

In order to control the rollout of its sustainable development commitments, manage related risks and encourage communication with stakeholders, SUEZ developed a specific reporting system for these areas in 2003. This system was developed on the basis of recommendations arising from the work performed at international discussion bodies like the Global Reporting Initiative (GRI) or the World Business Council for Sustainable Development (WBCSD). It covers all information required, including publication in the Management Report required by Article 225 of the Grenelle II Law and by Decrees dated April 24, 2012 and August 19, 2016 as well as by Ordinance 2017-1280 of July 19, 2017 and Decree 2017-1265 of August 9, 2017.

Through its subsidiaries, SUEZ conducts very different types of business in the water and waste industries and has many different types of contracts, as shown by the wide variety of operational methods implemented at several thousand sites across the world. This wide array of situations in addition to constant change in the Group's operational scope make it particularly difficult to harmonize the definitions of relevant indicators as well as to calculate and collect statistical data. As a result, SUEZ is continuing its efforts to have data audited by third parties, a key to increased reliability. The aim is to make the non-financial reporting process an increasingly effective guidance tool for supporting the goals of the Group's Sustainable Development and Corporate Social Responsibility Roadmap, as well as a tool used in dialog regarding the ongoing improvement of its overall performance.

5.9.4.2 External audits and verifications

Until 2017, external audit work entrusted by the Group to an independent third party organization fell under the obligations of Article 225 of the Grenelle II Law, enabling it to obtain:

- a declaration stating that all information required by Article R. 225-102-1 of the French Commercial Code and Decrees dated April 24, 2012 and August 19, 2016 was contained in the Management Report and the Reference Document;
- a reasoned opinion on the fairness of the information published in the Management Report and the Reference Document, with a limited assurance conclusion that the information is presented fairly in all material aspects.

Since the 2018 fiscal year, the work that the Group requested a third party to perform now falls under the new obligations under Ordinance 2017-1280 of July 19, 2017 and Decree 2017-1265 of August 9, 2017, which translates into French law European Directive 2014/95/EU pertaining to the publication of non-financial information, namely producing a reasoned opinion on the statement of non-financial information expressing a limited assurance conclusion on:

- the statement complying with the provisions set forth in Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with paragraph 3 of Article R. 225-105-I and II of the French Commercial Code, namely actions and results of policies, including key performance indicators related to the main challenges identified.

However, for the sake of maintaining continuity with previous years, this assignment has been expanded to producing a limited reasoned opinion on all the environmental and social indicators published during previous years and in the Management Report and Universal Registration Document under the previous obligations of Article 225 of the Grenelle II Law, and which remain published for 2019 in chapters 5.9 and 15.2.

In addition, beyond these regulatory obligations and to maintain continuity with previous years, the Group also entrusted its Statutory Auditors with specialized services for 2019:

- an assignment to verify 6 calculated environmental indicators based on 124 primary environmental indicators with reasonable assurance;
- an assignment to verify 10 calculated social indicators based on 32 primary social indicators with reasonable assurance.

The indicators verified with reasonable assurance are indicated by special characters (XXX) in sections 5.9.2, 5.9.3 and chapter 15.2.

5.9.4.3 Methodological aspects of the environmental report

SCOPE

The figures published in the Universal Registration Document relate exclusively to fully consolidated companies whose operations are controlled by SUEZ. When a company becomes fully consolidated, 100% of its environmental data is incorporated, irrespective of the percentage held by the Group in its capital. The scope of consolidation is set on June 30 of each year. For disposals occurring after that date, the entity is expected to fill in the environmental questionnaire with the data available up until the date of disposal. Acquisitions completed after June 30 are not taken into account. Legal entities included within the scope of environmental reporting are those whose activity is relevant in terms of environmental impact (therefore excluding financial, construction and engineering activities). Only entities that have industrial operations and on which SUEZ has a determining technical and operational influence are included within the scope of reporting. Comparisons between reporting periods are made on a like-for-like basis. Scope limitations may be applied to certain published variables. These are indicated in each case.

- **Waste businesses**

  Waste management includes collection, sorting and recycling, material, biological or energy recovery, incineration, landfilling (open and closed sites), and the treatment of hazardous waste, including soil remediation.

- **Water businesses**

  Water management covers all the activities of the water cycle, including the treatment and distribution of drinking water, the collection and treatment of wastewater, the reuse of treated wastewater, the desalination of seawater, as well as sludge treatment and recovery.

- **Industrial businesses**

  The industrial business includes all water production and wastewater treatment business activities for industrial companies, as well as the production of equipment and chemical products.

REPORTING TOOL

Since 2003, SUEZ has been using an online computer-based environmental reporting system. This software facilitates the management and documentation of the environmental reporting scope, the input, control and consolidation of indicators, the publication of reports, and finally, provision of the documentation needed to collect data and monitor the reporting process.

PROCEDURES

For its environmental reporting, SUEZ makes the procedures, tools and supporting documents available online to contributors. Depending on the organization and distribution of current responsibilities, SUEZ's procedures and IT tools are directly deployed through the central management of the Business Units. The process for the reporting and validation of information at lower levels (subsidiaries, regional offices and operational sites) is organized in accordance with internal procedures and checks put in place by each business unit. Internal procedures and IT tools tailored to each local organization are used at these levels.

A Group-wide network of Data Owners formally appointed by each reporting entity is responsible for applying all of the procedures and instructions. The working procedures and instructions at Group level provide a detailed description of the various phases for gathering, checking, consolidating, validating and communicating environmental data to the corporate department responsible for organizing the process. They are supported by technical documents laying down methodological guidelines for calculating certain indicators.

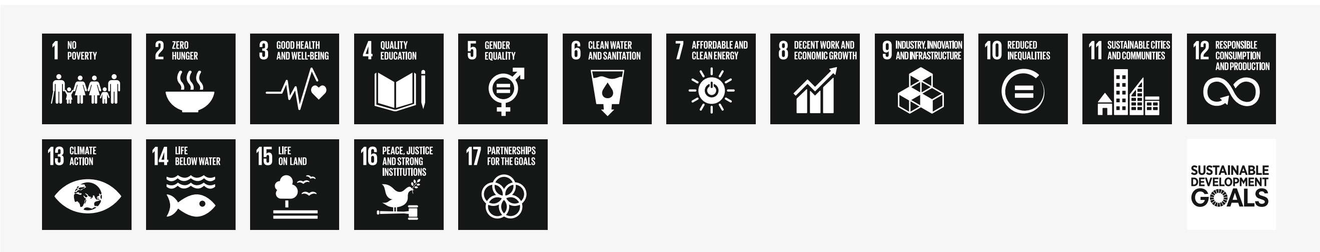
5.9.4.4 Methodological aspects of the Social Report

Methodological aspects of the Social Report are presented in section 15.2.6.

5.9.5 SUEZ's contribution to Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by 193 Member States of the UN in September 2015 and pertain to the 2015-2030 period. There are 17 SDGs, each one broken down into some dozen targets. They may be viewed at https://sustainabledevelopment.un.org/sdgs: (1) no poverty; (2) zero hunger; (3) good health and well-being; (4) quality education; (5) gender equality; (6) clean water and wastewater; (7) affordable and clean energy; (8) decent work and economic growth; (9) industry, innovation and infrastructure; (10) reduced inequality; (11) sustainable cities and communities; (12) responsible consumption and production; (13) climate action; (14) life below water; (15) life on land; (16) peace, justice and efficient institutions; (17) partnerships to achieve the Goals. Aware of how necessary it is for private companies to adopt SDGs, SUEZ believes these cross-cutting challenges are a valuable framework for the Group's strategy. All of the 169 "targets" and 244 progress indicators used by the UN have been reviewed to that end. SUEZ distinguishes the targets in line with its core business activities for which it wants to be a driving force, targets that present opportunities in terms of social innovation or developing new services, and targets that require the Group to remain vigilant throughout its entire value chain.

The table below shows SUEZ's contribution to these goals and the associated targets with regard to the various information present in this chapter. SUEZ has made a particular contribution to SDGs 6, 8, 12 and 13. Through its internal policies on gender diversity and health, safety and well-being at work, SUEZ also contributes to SDGs 3 and 5.



Main challenges identified in the Non-Financial Performance Statement		SGDs and related targets								
5.9.2.1.1	Environmental management	6.3	9.4	12.4	12.6	12.8	13.3			
5.9.2.1.2	Optimized water and waste management	6.3	7.2	11.6	12.4	12.5				
5.9.2.1.3	Making the water supply safer	6.3	9.b	9.4	9.5					
5.9.2.1.4	Fighting climate change	7.2	7.3	9.4	11.6	12.6	12.8	17.16	17.17	
5.9.2.1.5	Protection of biodiversity and ecosystems	14.1	14.3	14.a	15.1	15.5	15.8	15.a		
5.9.2.1.6	Social and societal contribution of the Group's activity	1.4	3.3	3.9	4.2	4.4	4.5	5.1	5.2	5.4
		5.5	8.3	8.5	8.6	8.8	8.10	9.3	10.2	10.3
		10.4	14.1	14a	15.1	15.5	16.1	16.5	16.6	16.7
		16.10	17.3	17.9	17.17					
5.9.2.1.7	Promotion of human rights and duty of vigilance	3.4 8.7	3.5 8.8	3.6 16.7	3.8 16.10	5.1	5.5	6.1	6.2	
5.9.2.1.8	Protection of Health and Safety for all	8.8								
5.9.2.1.9	Fighting corruption	16.5	16.6							

5.9.6 ESG performance recognized by major international indices

Strengthened by the increasing importance of sustainable development within its strategy, SUEZ has once again consolidated its excellent performance in relation to the expectations of non-financial rating agencies and its presence in the main international ESG indices. Thus, in 2019:

- The Group was included for the 11th consecutive year in the DJSI World index, created in 1999 by S&P Dow Jones Indices in conjunction with RobecoSAM, which recognizes the top 10% most sustainable market caps in their industry, based on their sustainability scores, from among the 2,500 largest market caps.
- Vigeo Eiris confirmed SUEZ's first place in its assessment of companies in the Waste and Water Utilities sector, and its inclusion in all Euronext/Vigeo Eiris indices. It also ranks 3rd worldwide, from all business sectors combined, out of the 4,885 companies assessed by Vigeo Eiris.
- MSCI confirmed SUEZ's A rating, similar to that obtained in 2018.
- Ecovadis has confirmed SUEZ's "Gold" level; recognition of the top 5% of companies by this agency specializing in ESG supplier performance evaluation.

Finally, SUEZ has been included in the CDP's "Climate A List" since 2016, which provides annual recognition of the 2% of global companies that have obtained the best climate performance rating.

Agencies	Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
RobecoSAM	**DJSI**	71	77	84	80 [a]	80	79	82	82	79 [a]	76
Oekom research	**Corporate Responsability**	–	–	B prime	B prime	–	B prime	B prime	B prime	B- prime	–
Vigeo Eiris	**EURONEXT Vigeo Eiris**	–	56	–	59	–	58	–	66	–	71
FTSE Russell	**FTSE4Good**	–	–	–	99	90	85	85	82	91	–
CDP	**CDP Climate List**	74	84	84	88	95	99	A [b]	A	A	A
Sustainalytics	**STOXX**	–	–	–	–	82.2	83	–	83	84	–

All ratings are 100 unless otherwise noted and in the case of a letter scoring method,'A' is the maximum score.
(a) Downgraded due to a change in methodology.
(b) Change in rating system in 2016.

5.9.7 Independent third party's report on the consolidated non-financial performance statement presented in the Management Report

This is a free translation into English of the independent third party's report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

For the year ended December 31st, 2019

To the Shareholders,

In our capacity as independent third party of your company (hereinafter the "entity"), accredited by COFRAC under number 3-1058 (whose scope is available at www.cofrac.fr), and member of the Mazars network of one of the SUEZ Statutory Auditors, we hereby report to you on the consolidated non-financial statement for the year ended December 31st, 2019 (hereinafter the "Statement"), included in the Group Management Report pursuant to the legal and regulatory requirements of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code *(Code de commerce)*.

The entity's responsibility

Pursuant to legal and regulatory requirements, the Board of Directors is responsible for preparing the Statement, including a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement and available on request from the entity's head office.

Independence and quality control

Our independence is defined by the requirements of Article L. 822-11-3 of the French Commercial Code and the French Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional guidance and applicable legal and regulatory requirements.

Responsibility of the independent third party

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the requirements of Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with Article R. 225-105 I, 3° and II of the French Commercial Code, *i.e.*, the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on:

- the entity's compliance with other applicable legal and regulatory requirements, in particular the vigilance plan and anti-corruption and tax avoidance legislations nor on;
- the compliance of products and services with the applicable regulations.

1 – OPINION ON THE COMPLIANCE AND THE FAIRNESS OF THE STATEMENT

Nature and scope of our work

Our work described below was performed in accordance with the provisions of Articles A. 225-1 *et seq.* of the French Commercial Code as well as with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements, and with ISAE 3000[1]:

- We obtained an understanding of the entity's activities and of all the companies included in the scope of consolidation, the statement of the main social and environmental risks related to this activity;
- We assessed the suitability of the Criteria with respect to their relevance, completeness, reliability, neutrality and understandability with due consideration of industry best practices, where appropriate;
- We verified that the Statement includes each category of social and environmental information set out in Article L. 225-102-1 III of the French Commercial Code, as well as information regarding human rights and the anti-corruption and tax evasion legislation;
- We verified that the Statement includes an explanation for the absence of the information required under Article L. 225-102-1 III, 2 of the French Commercial Code;
- We verified that the Statement presents the business model and the principal risks associated with the activity of all the entities included in the scope of consolidation; including where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and outcomes, including key performance indicators;
- We referred to documentary sources and conducted interviews to:
  - assess the process used to identify and confirm the principal risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the principal risks and the policies presented, and
  - corroborate the qualitative information (measures and outcomes) that we considered the most important presented in Appendix 1. For the risk " Promoting Human Rights and the Vigilance Plan", our work was carried out at the level of the consolidating entity, to other risks, work was carried out at the level of the consolidating entity and in a selection of entities;

(1) ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

- We verified that the Statement covers the consolidated scope, *i.e.* all the companies included in the scope of consolidation in accordance with Article L. 233–16 of the French Commercial Code, within the limitations set out in the Statement;
- We obtained an understanding of internal control and risk management procedures the entity has put in place, and assessed the data collection process implemented by the entity to ensure the completeness and fairness of the Information;
- For the key performance indicators and other quantitative outcomes that we considered to be the most important presented in Appendix 1, we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
  - tests of details using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities[1] and covers between 10% and 65% of the consolidated data relating to these tests (26% of employees, 39% of energy consumption, 45% of GHG emissions, 10% of supplied water and 65% of the eliminated waste),
- We assessed the overall consistency of the Statement based on our knowledge of the entities included in the scope of consolidation;

We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry more extensive procedures.

Means and resources

Our work was carried out by a team of eleven people and took place between September 2019 and February 2020 on a total duration of intervention of about 20 weeks.

We conducted around forty interviews with the persons responsible for the preparation of the Statement including, in particular, the Sustainable Development, Ethics and Compliance, Health and Safety, Social Relations, Performance and Industrial Risks, Learning and Diversity, Procurement and Legal Departments.

Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the non-financial statement is not presented in accordance with the applicable regulatory requirements and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.

2 – LIMITED ASSURANCE REPORT ON THE SELECTED INFORMATION

Nature and scope of the work

Concerning the Information Selected by the entity, identified in Appendix 2, we conducted work of the same nature as described in paragraph 1.

The selection of contributing entities covers between 17% and 38% of the social information presented and between 23% and 79% of the environmental information presented.

We believe that the work carried out is sufficient to provide a basis for our limited assurance on the Selected Information.

Conclusion

Based on the procedures performed, we have not identified any significant misstatement that causes us to believe that the Selected Information, taken together, has not been fairly prepared in compliance with the Criteria.

Paris-La Défense, the 26th of February 2020

Independent third party
French original signed by

MAZARS

Achour MESSAS Partner	Edwige REY CSR Partner

(1) **Social information:** SUEZ Recycling and Recovery UK, SUEZ RV France (Nord Est and Île-de-France), Lydec (Morocco), SUEZ North America, SUEZ Water Technologies and Solutions.
Environmental information: SUEZ Recycling and Recovery UK, SUEZ RV France, SUEZ North America, SUEZ Water Technologies and Solutions.

Appendix 1: Information considered as the most important

SOCIAL INFORMATION

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
► Share of women in management *(%)* ► Share of employees covered under a social dialog system *(%)* ► Number of fatal accidents involving employees ► Frequency rate of workplace accidents ► Proportion of employees who benefitted from training *(%)*	► Equal treatment (promotion of diversity) ► Social relations (social dialog) ► Health and Safety (prevention actions)

ENVIRONMENTAL INFORMATION

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
► Share of drinking water production sites and wastewater treatment plants located in water risk areas *(%)* ► Share of wastewater reused *(%)* ► Emissions avoided by SUEZ customers ► Production of renewable energy ► Direct GHG emissions ► Indirect GHG emissions ► Consumption of primary and secondary energy ► Share of waste recovery *(%)* ► Recycled plastic production ► Share of bottom ash recovered *(%)* ► Technical yield from drinking water distribution networks ► Energy produced/Energy consumption ratio (primary and secondary sources from Water activities)	► Management of environmental and industrial risks ► Optimized water and waste management (circular economy) ► Making the water supply safer ► Protection of biodiversity and ecosystems ► Fighting climate change

SOCIETAL INFORMATION

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
► Share of supplier contracts that include CSR clauses *(%)*	► Protecting human rights ► Fighting corruption ► Region's development

Appendix 2: Additional selected information verified in moderate insurance

SOCIAL INFORMATION

- Total headcount
- Distribution of the headcount between managers and non-managers
- Proportion of women in total headcount
- Turnover rate (resignations and dismissals)
- Voluntary turnover
- Hiring rate (permanent and fixed-term contracts)
- The number of annual training hours per employee
- Severity rate

ENVRIONMENTAL INFORMATION

- Capacity to produce alternative water
- Average NO_X and SO_X emission rate

5.9.8 Reasonable assurance report by the Statutory Auditors on a selection of consolidated information included in the Management Report

This is a free translation into English of the original report issued in French, and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

Year ended December 31st, 2019

To the shareholders,

In our capacity as SUEZ's Statutory Auditors, we hereby report to you our reasonable assurance report on the information selected by the company SUEZ, presented in Annex 1, and identified by the XXX sign in chapters 5.9 and 15.2 of the Universal Registration Document (hereinafter named "the Information"), for the financial year ended December 31st, 2019.

I. COMPANY'S RESPONSIBILITY

The Information was prepared, under the responsibility of the Board of Directors, in accordance with the HR, Health & Safety, and Environment reporting protocols used by the Company (hereinafter the "Criteria"), summarized in chapters 5.9 and 15.2 of the Universal Registration Document and available on request from the Human Resources Performance Department, the Health and Safety Department, and the Performance Department.

II. INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by the requirements of Article L. 822-11-3 of the French Commercial Code and by the French Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, professional standards and applicable legal and regulatory requirements.

III. STATUTORY AUDITORS' RESPONSIBILITY

On the basis of our work, our responsibility is to provide, at the request of the Company, a reasonable assurance as to whether the Information identified by the symbol XXX in Chapters 5.9 and 15.2 of the Universal Registration Document was prepared, in all material respects, in accordance with the adopted Criteria. Conclusions hereinafter expressed relate to this information only, and not on the whole of the Universal Registration Document's chapters 5.9 and 15.2.

Nonetheless, it is not our role to give an opinion on the entire Management Report for the year ended on the 31 December 2019 or on the compliance by your Company to other applicable legal provisions.

We performed the work described below in accordance with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements and with the ISAE 3000[1] international norm.

IV. NATURE AND SCOPE OF OUR WORK

- We conducted interviews with the persons responsible for preparing the Information, the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures.
- We assessed the suitability of the Criteria in terms of relevance, completeness, neutrality, clarity and reliability, by taking into consideration, when relevant, the sector's best practices.
- We verified the set-up within the Group of a process to collect, compile, process and check the Information with regard to its completeness and consistency. We familiarized ourselves with the internal control and risk management procedures relating to the compilation of the Information.
- We performed analytical procedures on the information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the Management Report.
- We performed detailed tests, using sampling techniques, on a representative sample of entities[2] that we selected based on their activity, their contribution to consolidated indicators, their localization and a risk analysis, consisting in verifying the calculations made and reconciling the data with supporting documents.

The selected sample thus represents 52% of the total headcount and between 50% and 89% of the quantitative environmental information and 70% of the Group direct and indirect greenhouse gas (GHG) emissions.

We believe that the sampling methods and the sample sizes we have used, based on our professional judgement, allow us to express a reasonable assurance on the Information. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

V. CONCLUSION

In our opinion, the Information identified by the XXX symbol was prepared, in all material respects, in accordance with the Criteria.

Courbevoie et Paris-La Défense, March 6th, 2020

The Statutory Auditors

MAZARS	ERNST & YOUNG ET AUTRES
Achour MESSAS	Stéphane PEDRON

(1) ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.
(2) **Human Resources information:** SUEZ Recycling and Recovery UK, SUEZ RV France (Nord Est and Île-de-France), SUEZ Eau France, SUEZ Spain, Agbar Chili, Lydec, SUEZ North America, SUEZ Water Technologies and Solutions, SUEZ Recycling and Recovery Belgium, SUEZ Recycling and Recovery Netherlands, SUEZ Polska.
Environmental information: SUEZ Recycling and Recovery UK, SUEZ RV France, SUEZ Eau France, SUEZ Spain, SUEZ North America, SUEZ Water Technologies and Solutions, SUEZ Recycling and Recovery Belgium, SUEZ Recycling and Recovery Netherlands, Sita Waste Services (Hong Kong), SUEZ Recycling and Recovery Pty Ltd (Australie).

Annex 1: Information selected by SUEZ verified in reasonable assurance

HUMAN RESOURCES INFORMATION

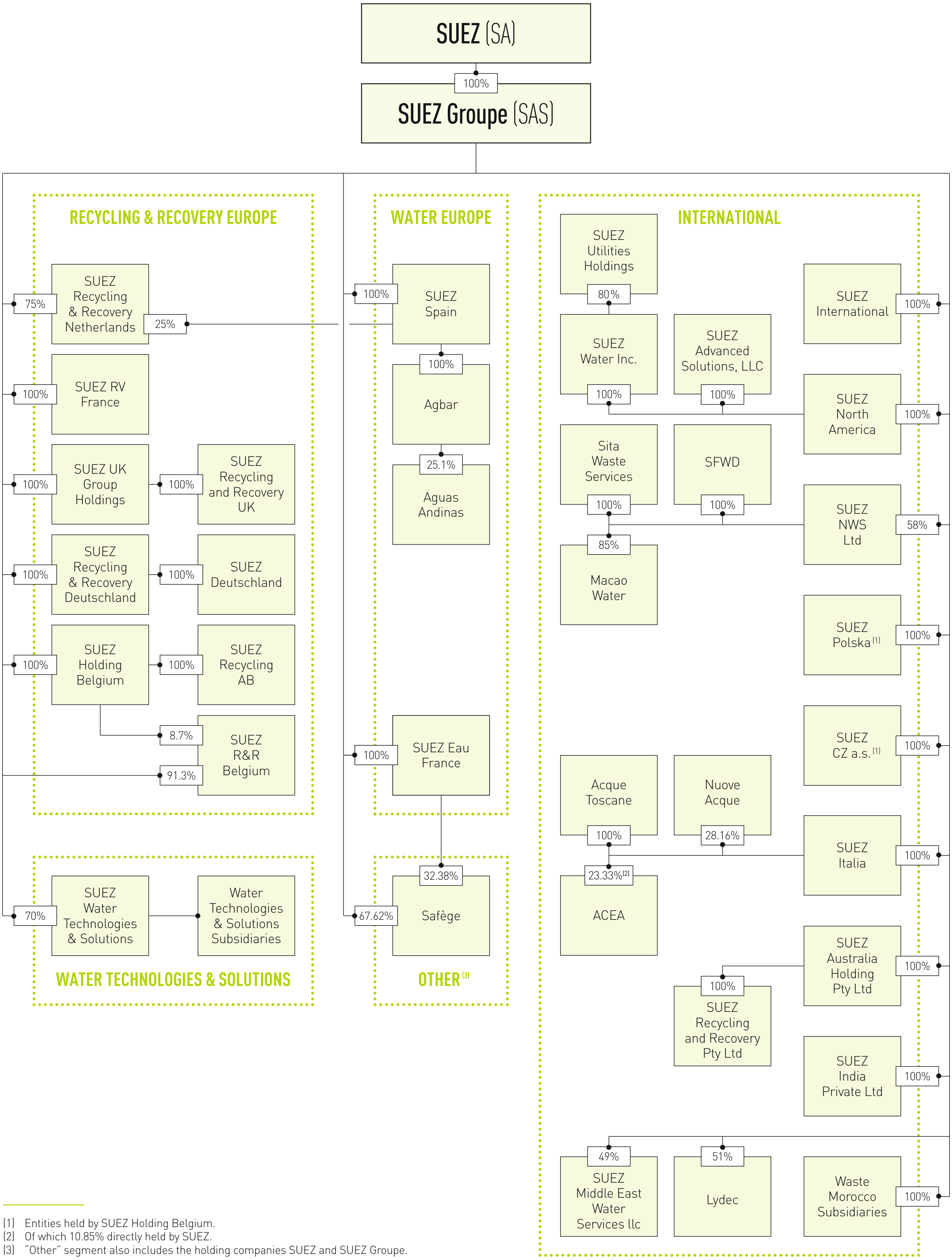
- Total headcount;
- Distribution of the headcount between managers and non-managers;
- Proportion of women in total headcount;
- Proportion of women amongst managers;
- Voluntary turnover;
- Lost-time accidents frequency rate;
- Severity rate;
- Number of fatal accidents (employees);
- Proportion of employees who benefitted from training.

ENVIRONMENTAL INFORMATION

- Renewable energy production and energy consumption of the Group's Water activities;
- Renewable energy production and energy consumption of the Group's Recycling and Recovery activities;
- Renewable energy production and energy consumption of the Group's Industry activities;
- Direct greenhouse gas (GHG) emissions from processes or equipment owned or controlled by SUEZ, and indirect emissions associated with the consumption of electricity and heat;
- Technical yield of the networks of the Group's Water activities.

6 Organizational Chart

6.1 Simplified Group organization as of December 31, 2019



(1) Entities held by SUEZ Holding Belgium.
(2) Of which 10.85% directly held by SUEZ.
(3) "Other" segment also includes the holding companies SUEZ and SUEZ Groupe.

6.2 Presentation of the Group's main subsidiaries

The presentation of the activities of the Group's main subsidiaries is found in chapter 5 of this document. Note 25 to the Consolidated Financial Statements in chapter 18.1 gives the list of the main Group's companies.

6.3 Relations with subsidiaries

SUEZ is a holding company. As of December 31, 2019, it owns, 100% of the share capital of SUEZ Groupe SAS and 10.85% of Acea SpA share capital. It carries the majority of the Group's bond debt (see chapter 8.3 of this Universal Registration Document).

On January 1, 2008, a tax consolidation Group was created in France between the Company and the subsidiaries in which it holds at least 95% of the capital. As a result of this tax Group, SUEZ and each of the tax Group member companies have entered into tax consolidation agreements. Every year, subsidiaries might leave or enter the consolidated SUEZ tax Group. When subsidiaries enter the tax Group, new agreements are concluded between SUEZ and each subsidiary entering the Group.

The Group has established a centralized cash management system for its main French and international subsidiaries, which optimizes net cash positions at the SUEZ Groupe SAS level.

Other cash flows within the Group consist primarily of loans granted by SUEZ Groupe SAS to some of its subsidiaries.

In addition to cash flows related to cash management and financing, SUEZ Groupe SAS receives dividends from its subsidiaries; for fiscal year 2018, these dividends totaled EUR 270.2 million, and were almost fully paid out in 2019.

Moreover, SUEZ Groupe SAS provides different types of services to other subsidiaries of the Group. In 2019, the total amount billed by SUEZ Groupe SAS for these services amounted to EUR 245.0 million.

7 Financial review

7.1 General information

7.1.1 Introduction

In 2019, SUEZ posted an organic **revenue** growth of +3.6%.

Current operating income rose +5.8% and EBITDA grew organically by +3.9% (see section 7.2.2 for a description of these variations).

Net income Group share totaled EUR 352 million, up EUR 17 million compared to 2018.

Free cash flow [1] before disposals and development capital expenditure amounted to EUR 1,095 million, up +7% compared to 2018.

Net debt amounted to EUR 10,151 million as of December 31, 2019. It takes into account the EUR 1,460 million impact of the application of IFRS 16 as of January 1, 2019. Under constant accounting standards, net debt was EUR 8,708 million compared with EUR 8,954 million at December 31, 2018, a decrease of -2.7% (-EUR 246 million). Net debt accounted for 109.3% of total shareholders' equity at the end of 2019, *versus* 99.6% at the end of 2018. Under constant accounting standards, the net debt/EBITDA ratio was 3.0 at year-end 2019, 0.2 point lower than the level of 3.2 at the end of 2018.

The table below shows the key figures of the statement of financial position for fiscal years 2019 and 2018:

(in millions of euros)	2019	2018
Non-current assets	24,153.2	22,680.9
Current assets	11,480.9	10,872.0
Total assets	**35,634.1**	**33,552.9**
Shareholders' equity, Group share	6,463.4	6,391.8
Non-controlling interests	2,824.8	2,600.8
Other liabilities	26,345.9	24,560.3
Total liabilities	**35,634.1**	**33,552.9**

(1) The Group uses the free cash flow indicator to measure cash generated from existing operations before development capex. The reconciliation of cash generated from operations before net financial expenses and income tax to free cash flow is presented in section 7.3.1 of this document.

7.1.2 Significant events in the period

Disposal of 20% of regulated water business activities in the United States

In accordance with the agreement signed on July 25, 2018 with PGGM, a Dutch pension fund management company, SUEZ finalized on March 1, 2019, the disposal of 20% of the share capital of SUEZ Water Resources Inc., the parent company of all regulated water activities in the United States. The transaction amounted to USD 601 million, fully paid in cash. At the end of this operation, SUEZ still controls the company.

Definitive dispute settlement between SUEZ and Argentina over Aguas Argentinas

The government of Argentina and SUEZ signed and executed, in April 2019, a transactional settlement agreement in accordance with the sentence handed down in its favor by the ICSID (International Centre for Settlement of Investment Disputes) for the concession of water and wastewater treatment in Buenos Aires, terminated in 2006.

Several entities both inside and outside SUEZ Group were involved in the procedure and benefited from this agreement. In April 2019, solely for the SUEZ Group, the amount in cash received totaled EUR 224.1 million.

In addition, on December 14, 2018, the ICSID handed down a definitive favorable ruling to SUEZ as part of the termination of the Aguas Provinciales de Santa Fé water and wastewater concession contract (see Note 23 of chapter 18.1 of this Universal Registration Document).

Bond redemption

On April 8, 2019, SUEZ repaid the EUR 800 million nominal loan issued on April 8, 2009. It bore a coupon of 6.25%.

New bond issue and partial buyback of existing bonds

On October 14, 2019, SUEZ issued new 12-year senior bonds for a total amount of EUR 700 million. The new shares will bear interest at a fixed rate of a 0.500% per year.

The funds raised have been allocated to refinance the partial buyback of existing bonds for a total nominal amount of EUR 449.7 million:

- EUR 151.8 million of an initial amount of EUR 750 million with a 4.078% coupon, maturing in 2021;
- EUR 135.3 million of an initial amount of EUR 750 million with a 4.125% coupon, maturing in 2022;
- EUR 123.6 million of an initial amount of EUR 500 million with a 2.750% coupon, maturing in 2023;
- EUR 39.0 million of an initial amount of EUR 500 million with a 5.500% coupon, maturing in 2024.

Issue of new Undated Deeply Subordinated Notes and buyback of notes issued in 2014

On September 12, 2019, SUEZ issued new Undated Deeply Subordinated Notes for a total amount of EUR 500 million. The new notes will bear interest at a fixed rate of 1.625%, revised for the first time seven years after issue, then every five years. The funds raised have been allocated to buyback the notes issued in June 2014 for an amount of EUR 352.1 million.

As of December 31, 2019, the outstanding amount of Undated Deeply Subordinated Notes is EUR 1,747.9 million, compared with EUR 1,600 million as of December 31, 2018. These lines are not recognized in financial debt as they meet the conditions set out in IAS 32 for recognition in equity.

7.2 Analysis of income statements

7.2.1 Explanations on main income statement items

Revenues

Revenues generated by water supply are based on volumes delivered to customers that are either individually metered and invoiced or estimated based on the output of the supply networks.

The price for wastewater services and wastewater treatment is either included in the water distribution bill, or is billed separately to the local authority or industrial customer.

Revenues arising from waste collection are generally based on the tonnage collected and the service provided by the operator.

Revenues from other forms of waste treatment (primarily sorting and incineration) are based on volumes processed and services rendered by the operator, plus the additional revenues from recovery operations, such as the sale of raw materials for sorting centers (paper, cardboard, glass, metals, plastics, etc.) and the sale of energy (electricity or heat) for incinerators.

Revenues from engineering, construction and service contracts are determined using the percentage of completion method. Depending on the contract concerned, the stage of completion may be determined either based on the proportion that costs incurred to date bear to the estimated total costs of the contract, or on the physical progress of the contract based on factors such as contractually defined stages.

Purchases

Purchases primarily include purchases of unpurified water intended for treatment prior to delivery to customers, as well as purchases of equipment, parts, energy, fuel and recyclable materials.

Other operating income and expenses

Other operating income includes re-invoicing direct charges and overheads.

Other operating expenses mainly include costs relating to subcontracting and other external services, maintenance and repair costs for waste collection and treatment equipment, production costs, waste and water treatment costs, and administrative costs. This item also includes other routine operating expenses such as rental expenses, external personnel costs, commissions and fees to intermediaries, and taxes other than corporate income tax.

Current operating income

Current operating income is an indicator used to present a certain level of operating performance. It is a subtotal that facilitates interpretation of the Group's performance by excluding elements which, in the Group's view, are insufficiently predictable due to their unusual, irregular or non-recurring nature. These elements relate to asset impairments, disposals, scope effects, restructuring costs and Mark-to-Market of trading instruments.

EBITDA

The Group uses EBITDA to measure its operating performance and its ability to generate operating cash flows.

EBITDA is not defined in IFRS and does not appear directly in the Group's consolidated income statement. Current operating income can be reconciled with EBITDA as follows:

Current operating income

– Net depreciation, amortization and provisions
– Share-based payments (IFRS 2)[a]
– Net disbursements under concession contracts[b]
+ Share in net income of equity-accounted companies considered as the Group's core business
– Other

EBITDA

(a) This item includes the allocation of stock options, free bonus shares and payments made by the Group in relation to Company savings plans (including employer's matching contributions or matching shares).
(b) This item corresponds to the sum of the renewal expenditure relating to concessions and to changes in assets and liabilities for concession renewals.

The reconciliation of current operating income to EBITDA for 2019 and 2018 is set out in Note 3.4.1 to the Consolidated Financial Statements (chapter 18.1 of this Universal Registration Document).

7.2.2 Comparison of fiscal years ended December 31, 2019 and 2018

(in millions of euros)	December 31, 2019	December 31, 2018
Revenues	18,015.3	17,331.1
Purchases	(3,720.7)	(3,648.6)
Personnel costs	(4,701.4)	(4,598.4)
Depreciation, amortization and provisions	(1,531.7)	(1,167.7)
Other operating expenses	(7,089.8)	(6,999.2)
Other operating income	236.7	225.2
Current operating income	**1,208.4**	**1,142.4**
Mark-to-Market on operating financial instruments	3.7	(0.8)
Impairment on property, plant and equipment, intangible and financial assets	(64.8)	(25.6)
Restructuring costs	(132.3)	(87.6)
Scope effects	8.4	(6.2)
Other gains and losses on disposals and non-recurring items	26.6	60.1
Aguas Argentinas dispute settlement	214.9	–
Income from operating activities	**1,264.9**	**1,082.3**
Share in net income of equity-accounted companies considered as core business	198.3	192.9
Of which: share in net income (loss) of joint ventures	*71.4*	*82.0*
Of which: share in net income (loss) of associates	*126.9*	*110.9*
Income from operating activities after share in net income of equity-accounted companies considered as core business	**1,463.2**	**1,275.2**
Financial expenses	(603.8)	(555.6)
Financial income	89.8	90.2
Net financial income (loss)	**(514.0)**	**(465.4)**
Income tax expense	(340.0)	(244.0)
Net income	**609.2**	**565.8**
Net income, Group share	**351.7**	**334.9**

Other income items

(in millions of euros)	2019	2018
EBITDA	3,220.4	2,768.3
EBIT	1,407.7	1,335.3

Revenues

(in millions of euros)	2019	2018	Change	% Change
Water Europe	4,638.1	4,628.9	9.2	0.2%
Recycling and Recovery Europe	6,471.5	6,206.1	265.4	4.3%
International	4,195.4	3,990.2	205.2	5.1%
WTS	2,595.4	2,396.3	199.1	8.3%
Other	114.9	109.6	5.3	4.8%
Revenues	**18,015.3**	**17,331.1**	**684.2**	**3.9%**

SUEZ posted revenues of EUR 18,015 million in 2019, a +3.9% increase. This growth is the result of the following elements:

- organic growth of +EUR 625 million (+3.6%);
- unfavorable scope effects of -EUR 47 million (-0.3%);
- favorable exchange impacts of +EUR 106 million (+0.6%) mainly due to the appreciation of the US dollar (+EUR 111 million), and the Moroccan dirham (+EUR 20 million) against the euro, partially offset by an appreciation of the euro against the Chilean peso (-EUR 27 million) and the Australian dollar (-EUR 21 million).

WATER EUROPE

The Water Europe segment contributed EUR 4,638 million to Group revenues in 2019, up EUR 9 million (+0.2%).

Water Europe posted +1.4% in organic revenue growth (+EUR 64 million):

- Water France recorded an organic decrease of -0.2% (-EUR 4 million). Water volumes sold increased by +1.0%, and tariff indexation was up +1.8%. However, the year's performance was negatively impacted by net commercial activity, particularly with the end of the Bordeaux contract;
- Spain posted organic growth of +1.7% (+EUR 26 million). Water volumes sold were up +1.9%, thanks to a particularly hot and dry weather year. Tariffs were down -0.4%, including the -1.65% reduction negotiated in Barcelona for 2018, which impacts 2019 from January to May;
- Latin America grew organically by +4.5% (+EUR 41 million). In Chile, water volumes sold were up +0.6% and tariffs were up +1.6%. The progression of construction projects in Panama and Ecuador made an additional contribution to growth in the region.

Changes in currencies against the euro had a negative impact on revenues (-EUR 25 million, or -0.5%) mainly due to the weakening of the Chilean peso against the euro.

RECYCLING AND RECOVERY EUROPE

The Recycling and Recovery Europe segment's contribution to Group revenues was EUR 6,471 million in 2019, up +EUR 265 million (+4.3%) compared to 2018.

Recycling and Recovery Europe posted organic revenue growth of +4.9% (+EUR 305 million). Volumes of waste treated were up +1.5% compared to 2018.

- the Industrial Waste Specialties business posted strong organic growth of +11.4% (+EUR 51 million), driven in particular by the remediation of polluted soil and price increases;
- the Benelux/Germany zone posted organic growth of +9.3% (+EUR 138 million). The under-capacity situation of treatment assets in the region led to price increases for Industrial and Commercial customers;
- the United Kingdom/Scandinavia zone reported +5.2% organic growth (EUR +63 million). The activity benefited from the launch of the Greater Manchester area waste management contract on June 1, 2019;
- France posted organic revenue growth of +1.6% (+EUR 51 million).

The scope effect was -0.5% (-EUR 34 million).

Changes in currencies against the euro had a net negative impact on revenues (-EUR 5 million, or -0.08%).

INTERNATIONAL

The International segment's contribution to Group revenues was EUR 4,195 million in 2019, up +EUR 205 million (+5.1%) compared to 2018.

The organic variation was +EUR 117 million, or +2.9%, resulting from the following performances:

- Asia recorded organic revenue growth of +11.8% (+EUR 55 million). The region's organic performance was positively impacted in the first half by the takeover of the water assets of Shanghai Chemical Industrial Park (SCIP) on July 1, 2018;
- the Italy, Central and Eastern Europe region delivered organic growth of +7.1% (+EUR 36 million);
- Australia decreased by -5.2% (-EUR 56 million) in organic growth due to an unfavorable base effect related to the completion of major infrastructure works around Sydney;
- North America posted a +3.5% organic growth (+EUR 32 million);
- Africa, Middle East, India posted organic growth of +5.0% (+EUR 51 million) Business benefited from the ramp-up of the Coimbatore and Davengere contracts in India.

Changes in currencies against the euro had a positive impact on revenues (+EUR 73.2 million, or +1.8%).

WTS

The WTS division represented EUR 2,595 million in revenues in 2019, *versus* EUR 2,396 million in 2018.

The organic change totaled +EUR 134 million, or +5.6%, resulting from the following trends:

- the Engineering Systems segment grew +6.8%;
- the Chemical & Monitoring Solutions segment recorded organic growth of +3.8%, with contrasting trends – weak in the United States and positive in the rest of the world.

On January 1, 2020, the Group's new organization came into effect. For information purposes, a breakdown of 2018 and 2019 revenues has been established according to this new segmentation:

(in millions of euros)	2019	2018	Change	% Change
Water	7,058	6,838	220	3.2%
Recycling and Recovery	7,454	7,288	166	2.3%
Environmental Tech & Solutions	3,503	3,205	298	9.3%
Revenues	**18,015**	**17,331**	**684**	**3.9%**

Operating expenses

PURCHASES

Purchases totaled EUR 3,721 million in 2019, up +EUR 72 million (+2.0%) compared to 2018.

PERSONNEL COSTS

Personnel costs reached EUR 4,701 million in 2019, up +EUR 103 million (+2.2%) compared to 2018 (for a breakdown of personnel costs, see Note 4.2 to the Consolidated Financial Statements in chapter 18.1 of this Universal Registration Document).

DEPRECIATION, AMORTIZATION AND PROVISIONS

Net depreciation, amortization and provisions amounted to EUR 1,532 million in 2019, up +EUR 364 million compared to 2018. This variation is mainly due to the IFRS 16 application (depreciation of the right of use).

OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses totaled -EUR 6,853 million in 2019, a EUR 79 million net increase in expenses compared to 2018.

CURRENT OPERATING INCOME

(in millions of euros)	2019	2018	Change	% Change
Water Europe	422.9	431.4	(8.5)	-2.0%
Recycling and Recovery Europe	216.1	201.3	14.8	7.4%
International	412.4	362.9	49.5	13.6%
WTS	126.4	117.0	9.4	8.0%
Other	30.6	29.8	0.8	2.7%
Current operating income	**1,208.4**	**1,142.4**	**66.0**	**5.8%**

Group current operating income was EUR 1,208 million in 2019, up +EUR 66 million compared to 2018. This increase breaks down as follows:

- a +EUR 52 million organic increase (+4.6%);
- a scope effect of +EUR 4 million (+0.4%);
- a negative currency effect of -EUR 3 million.

WATER EUROPE

The Water Europe segment's contribution to Group current operating income was EUR 423 million in 2019, down -EUR 8 million (-2.0%) compared to 2018. This includes an unfavorable exchange rate effect (-EUR 11 million). In terms of organic growth, current operating income was almost the same as 2018 at -EUR 1 million (-0.2%).

RECYCLING AND RECOVERY EUROPE

The Recycling and Recovery Europe segment's contribution to Group current operating income totaled EUR 216 million in 2019, up +EUR 15 million (+7.4%) compared to 2018.

INTERNATIONAL

The International segment's contribution to Group current operating income was EUR 412 million in 2019, up +EUR 49 million (+13.6%) compared to 2018.

WTS

This division contributed EUR 126 million to Group current operating income in 2019, up +EUR 9 million.

EBITDA

(in millions of euros)	2019	2018	Change	% Change
Water Europe	1,151.9	1,136.1	15.8	1.4%
Recycling and Recovery Europe	880.5	683.8	196.7	28.8%
International	979.2	816.3	162.9	20.0%
WTS	278.2	249.6	28.6	11.5%
Other	(69.4)	(117.5)	48.1	40.9%
EBITDA	**3,220.4**	**2,768.3**	**452.1**	**16.3%**

Group EBITDA totaled EUR 3,220 million in 2019, up +EUR 452 million (+16.3%) compared to 2018, including +3.9% organic growth.

Income from operating activities

Income from operating activities was EUR 1,265 million in 2019, up +EUR 183 million compared to 2018.

The main items behind reconciliation between current operating income and income from operating activities are detailed below.

IMPAIRMENT ON PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE AND FINANCIAL ASSETS

The Group posted -EUR 65 million in impairment on property, plant and equipment, intangible and financial assets in 2019, compared to -EUR 26 million in 2018, a change of -EUR 39 million.

SCOPE EFFECTS

Scope effects amounted to +EUR 8 million in 2019, *versus* -EUR 6 million in 2018.

OTHER REVENUES AND DISPOSALS

Capital gains from asset disposals totaled EUR 27 million in 2019. The largest transactions concerned disposals of property, plant and equipment in Chile and Spain as well as losses on disposals and scrapping of fixed assets in France.

DISPUTE SETTLEMENT ON AGUAS ARGENTINAS

A description of this dispute settlement is provided in Note 2.2 to the Consolidated Financial Statements (chapter 18.1 of this Universal Registration Document). After taking into account various expenses and fees, the impact is EUR 214.9 million.

RESTRUCTURING COSTS

Restructuring costs amounted to -EUR 132 million in 2019, compared to -EUR 88 million in 2018.

Net financial income

(in millions of euros)	2019	2018	Change	% Change
Cost of net debt	(419.5)	(422.5)	3.0	0.7%
Other financial income and expenses	(94.5)	(42.9)	(51.6)	N/A
Financial income/(loss)	**(514.0)**	**(465.4)**	**(48.6)**	**-10.4%**

The Group's net financial income in 2019 was -EUR 514.0 million, a decline of -EUR 48.6 million compared to 2018. It is impacted by the implementation of IFRS 16 as of January 1, 2019 for -EUR 28 million and by liability management operations carried out in the third quarter for -EUR 33 million (see also Note 6 to the Consolidated Financial Statements in chapter 18.1 of this Universal Registration Document).

The cost of net debt totaled -EUR 420 million, compared to -EUR 423 million in 2018, with an average rate of 3.95%, *versus* 3.88% in 2018. In 2019, the average duration of net debt was 6.9 years.

Income tax expense

Group income tax expense totaled -EUR 340 million in 2019, up +EUR 96 million compared to 2018. The effective tax rate is 45.3%. With the restatement for the write-off of French deferred tax assets for EUR 48 million, it is 38.8%.

Net income, Group share

Net income Group share was EUR 352 million, up +EUR 17 million compared to 2018.

Since January 1, 2020, the Group presents new performance indicators including recurring net income, Group share and recurring EPS. These indicators exclude items that occur over a limited period of time to reflect the sustainable earnings attributable to shareholders:

(in millions of euros)	2018	2019
Net income, Group share (a)	**335**	**352**
Mark-to-market	1	(4)
Impairment	26	65
Restructuring costs	88	132
Cash and non-cash non recurring items	**115**	**193**
Capital gain/losses on disposals	(54)	(35)
Aguas Argentinas dispute settlement	–	(215)
Hybrid coupon	(45)	(52)
Non recurring financial result	–	33
Adjustment before tax	**16**	**(76)**
Applicable tax rate	(34.43)%	(34.43)%
Adjustment after tax (b)	**10**	**(50)**
Non recurring income tax (c)	–	48
Recurring net result, Group share = (a) + (b) + (c)	**345**	**350**
Average number of shares outstanding *(in million)*	618.0	618.0
Recurring EPS	**0.56**	**0.57**

7.3 Financing and net debt

7.3.1 Cash flows in fiscal years 2019 and 2018

(in millions of euros)	2019	2018
Cash flows from/(used in) operating activities	2,450.4	1,973.4
Cash flows from/(used in) investing activities	(1,454.6)	(1,230.3)
Cash flows from/(used in) financing activities	(860.7)	(593.0)
Impact of changes in exchange rates and other	20.6	4.7
Total flows for the period	**155.7**	**154.8**
Opening cash and cash equivalents	2,710.2	2,555.4
Closing cash and cash equivalents	2,865.9	2,710.2

Cash flows from operating activities

(in millions of euros)	2019	2018	Change	% Change
EBITDA	**3,220.4**	**2,768.3**	**452.1**	**16.3%**
+ Net disbursements under concession contracts	(263.3)	(262.4)	(0.8)	-0.3%
+ Impairment of current assets	7.2	(3.2)	10.5	N/A
+ Impact of restructuring costs	(133.9)	(144.8)	10.9	7.5%
+ Dividends received from joint ventures and associates	131.8	144.6	(12.8)	-8.8%
– Net allocations to provisions for employee benefits and other	(130.3)	(33.4)	(96.9)	N/A
– Share in net income (loss) of equity-accounted companies considered as core business	(198.3)	(192.9)	(5.4)	2.8%
+ Aguas Argentinas dispute settlement	222.5	–	222.5	N/A
– Other	0.6	0.6	–	N/A
Gross cash flow before net financial income/(expense) and income tax	**2,856.8**	**2,276.7**	**580.1**	**25.5%**
Tax paid	(253.3)	(156.9)	(96.4)	61.4%
Change in working capital requirement	(153.1)	(146.4)	(6.7)	4.6%
Cash flow from/(used in) operating activities	**2,450.4**	**1,973.4**	**477.0**	**24.2%**

Cash flows from operating activities amounted to EUR 2,450 million in 2019, up +EUR 477 million compared to 2018. This change mainly reflects:

- a -EUR 7 million net decrease in working capital requirement;
- a +EUR 96 million increase in tax paid;
- a +EUR 580 million increase in cash flows from operations before net financial income/(expense) and income tax.

Cash flows from investing activities

(in millions of euros)	2019	2018	Change	% Change
Investments in property, plant and equipment and intangible assets	(1,417.3)	(1,342.9)	(74.4)	-5.5%
Financial investments	(88.6)	(146.4)	57.8	39.5%
Of which acquisitions of entities net of cash and cash equivalents	*(72.7)*	*(114.7)*	*42.0*	*36.6%*
Of which acquisitions of equity instruments	*(15.9)*	*(31.7)*	*15.8*	*49.8%*
Disposals of property, plant and equipment and intangible assets	85.6	157.9	(72.3)	-45.8%
Disposals of entities net of cash and cash equivalents	43.4	83.1	(39.7)	-47.8%
Disposal of equity instruments	8.7	4.2	4.5	N/A
Other net interest on financial assets	(23.4)	14.1	(37.5)	N/A
Dividends received on non-current financial assets	3.6	8.5	(4.9)	-57.6%
Change in loans and financial receivables	(66.7)	(8.8)	(57.9)	N/A
Cash flow from/(used in) investing activities	**(1,454.6)**	**(1,230.3)**	**(224.3)**	**-18.2%**

Cash flows from investing activities amounted to -EUR 1,455 million as of December 31, 2019, compared to -EUR 1,230 million as of December 31, 2018.

MAINTENANCE AND DEVELOPMENT CAPITAL EXPENDITURE AND FREE CASH FLOW

Within "Investments in property, plant and equipment and intangible assets", the Group distinguishes:

- maintenance capital expenditure, corresponding to investments incurred to replace equipment and machinery operated by the Group, as well as investments made in order to comply with new regulations; and
- development capital expenditure [1], corresponding to investments incurred to build new facilities for operation.

The maintenance capital expenditure as of December 31, 2019 and 2018 is presented in the following table:

(in millions of euros)	2019	2018
Total maintenance capital expenditure [a]	**(662.5)**	**(606.8)**
Of which maintenance capital expenditure	*(634.4)*	*(629.0)*
Of which change in maintenance asset supplier debt [b]	*(28.1)*	*22.2*

(a) The total amount of maintenance capital expenditure in 2019 breaks down as follows: EUR 195.2 million for the Water Europe segment, EUR 193.3 million for the Recycling and Recovery Europe segment, EUR 201.8 million for the International segment, EUR 50.6 million for the WTS segment and EUR 21.6 million for the Other segment. The breakdown as of December 31, 2018 was as follows: EUR 185.5 million for the Water Europe segment, EUR 185.9 million for the Recycling and Recovery Europe segment, EUR 186.1 million for the International segment, EUR 45.5 million for the WTS segment and EUR 3.8 million for the Other segment.
(b) Change in trade payables concerning the acquisition of maintenance-related property, plant and equipment and intangible assets.

The Group uses free cash flow as an indicator to measure cash generation from the Group's existing operations before any development capital expenditure.

The reconciliation of cash generated from operations before net financial income and income tax with free cash flow as of December 31, 2019 and 2018 is presented in the following table:

(in millions of euros)	2019	2018
Cash flow from operations before net financial income/(expense) and income tax	2,856.8	2,276.7
Total maintenance capital expenditure	(662.5)	(606.8)
Change in working capital requirement	(153.1)	(146.4)
Tax paid	(253.3)	(156.9)
Financial interest paid	(363.5)	(392.5)
Financial interest received	11.2	26.6
Other net interest on financial assets	(23.4)	14.1
Dividends received on non-current financial assets	3.6	8.5
Financial interest on lease liabilities [a]	(29.3)	–
Repayment of lease liabilities [a]	(291.9)	–
Other	(0.1)	0.1
Free cash flow	**1,094.5**	**1,023.4**

(a) These new lines are directly related to the application of IFRS 16 – Lease contract as of January 1, 2019.

Free cash flow amounted to EUR 1,095 million as of December 31, 2019, up +7% compared to December 31, 2018.

(1) Total development capital expenditure (EUR 754.8 million in 2019 vs. EUR 736.1 million in 2018) breaks down as follows in 2019: EUR 237.4 million for the Water Europe segment; EUR 179.3 million for the Recycling and Recovery Europe segment; EUR 292.7 million for the International segment, and EUR 45.4 million for the WTS segment.

At January 1, 2020, the Group presents new performance indicators including recurring free cash flow. This indicator excludes items occurring over a limited period of time to reflect the sustainable cash flow attributable to shareholders:

(in millions of euros)	2018	2019
Cash flows from operating activities	**1,973.4**	**2,450.4**
Investments in PP&E and intangible assets	(1,342.9)	(1,417.3)
Repayment of lease liabilities	–	(325.1)
Capex in PP&E and intangible assets and Lease expenses	**(1,342.9)**	**(1,742.4)**
Financial cash flow (Other net interest on financial assets)	14.1	(23.4)
Interests paid	(392.5)	(363.5)
Interests received	26.6	11.2
Financial interest on lease liabilities	–	(29.3)
Net financial charges	**(351.8)**	**(405.0)**
Dividends received on non-current financial assets	8.5	3.6
Capital increase-decrease/minority interests	(23.4)	5.2
Dividends paid to non-controlling interests	(249.4)	(266.8)
Flows, including dividends, to/from minorities	**(264.3)**	**(258.0)**
Hybrid coupon	(44.8)	(51.9)
Restructuring cash expenses	144.8	133.9
Recurring free cash flow	**114.4**	**127.0**

Cash flows from financing activities

(in millions of euros)	2019	2018	Change	% Change
Capital increase/reduction of Parent Company	–	–	–	N/A
Purchase/sale of treasury shares	2.9	(4.9)	7.8	N/A
Capital increase/reduction of non-controlling interests	5.2	(23.4)	28.6	N/A
Change in share of interests in controlled entities	501.7	(10.8)	512.5	N/A
Dividends paid to Parent Company's shareholders	(448.8)	(446.7)	(2.1)	-0.5%
Dividends paid to non-controlling interests	(266.8)	(249.4)	(17.4)	-7.0%
Issue of Undated Deeply Subordinated Notes net of costs	497.8	–	497.8	N/A
Repayment of the 2014 Undated Deeply Subordinated Notes net of costs	(363.7)	–	(363.7)	N/A
Increase in loans and financial debt	1,401.2	1,323.0	78.2	5.9%
Repayment of lease liabilities	(325.1)	–	(325.1)	N/A
Repayment of borrowings and financial debts	(1,448.0)	(766.5)	(681.5)	-88.9%
Change in financial assets at fair value through income	(0.6)	27.5	(28.1)	N/A
Financial interest on lease liabilities	(29.3)	–	(29.3)	N/A
Other financial interest paid	(363.5)	(392.5)	29.0	7.4%
Financial interest received	11.2	26.6	(15.4)	-57.9%
Flows on financial derivatives qualifying as net investment hedges and compensation payments on financial derivatives	(34.9)	(75.9)	41.0	54.0%
Cash flow from/(used in) financing activities	**(860.7)**	**(593.0)**	**(267.7)**	**-45.1%**

Cash flows from financing activities amounted to -EUR 861 million as of December 31, 2019, a -EUR 268 million difference compared to December 31, 2018.

Cash flows from financing activities in 2019 of -EUR 861 million are mainly due to:

- a EUR 700 million bond issue in October 2019 with a 12-year maturity;
- an issue in September 2019 of Undated Deeply Subordinated Notes for a nominal amount of EUR 500 million;
- the issue in 2019 of bonds in the United States for a total amount of EUR 218 million;
- an increase in outstanding commercial papers in the amount of EUR 37 million;
- the sale without loss of control of 20% of the regulated water business in the United States for EUR 510 million;
- the repayment of a bond issue with a nominal amount of EUR 800 million maturing on April 8, 2019;
- the partial redemption of the 2014 Undated Deeply Subordinated Notes for an amount of EUR 355 million;

- the partial buyback made on certain bonds in October 2019 for a total amount of EUR 450 million;
- the repayment in 2019 of EUR 325 million in lease liabilities;
- EUR 402 million in cash dividends paid by SUEZ;
- EUR 267 million corresponding to dividends paid to non-controlling interests by the other Group entities;
- EUR 363 million in financial interest payments.

The reconciliation of the changes in financial debt (excluding derivatives) presented in Note 13.2.1 of the chapter 18.1 of this Document for -EUR 42.2 million and the net decrease in financial debt of -EUR 46.8 million presented in the consolidated statement of cash flows is composed of the following items:

- changes in bank overdrafts repayable upon request positioned as a reduction in cash and cash equivalents in the consolidated statement of cash flows (IAS 7.8) for +EUR 123.2 million;
- restatement relating to finance leases for -EUR 87.2 million at the implementation of IFRS 16;
- exchange rate effects for -EUR 47.9 million;
- scope effect for -EUR 15.2 million;
- changes in fair value and amortized cost for +EUR 8 million;
- other items for +EUR 23.7 million.

7.3.2 Net debt

Net debt as of December 31, 2019 and 2018

(in millions of euros)	2019	2018	Change	% Change
Bonds	9,474.5	9,766.4	(291.9)	-3.0%
Commercial paper	678.4	641.8	36.6	5.7%
Draw-downs on credit facilities	345.9	319.1	26.8	8.4%
Borrowings under finance leases [a]	–	87.2	(87.2)	-100.0%
Other bank borrowings	557.2	484.4	72.8	15.0%
Other borrowings	221.8	223.8	(2.0)	-0.9%
Total borrowings	**11,277.8**	**11,522.7**	**(244.9)**	**-2.1%**
Bank overdrafts and current accounts	1,133.6	928.8	204.8	22.0%
Total outstanding borrowings	**12,411.4**	**12,451.5**	**(40.1)**	**-0.3%**
Financial assets measured at fair value through income excluding financial derivative instruments	(29.8)	(29.2)	(0.6)	-2.1%
Cash and cash equivalents	(3,703.0)	(3,424.1)	(278.9)	-8.1%
Total net financiel debt, exluding derivative financial derivative instruments and amortized costs	**8,678.6**	**8,998.2**	**(319.6)**	**-3.6%**
Impact of derivative financial instruments and amortized cost	(1.7)	(44.3)	42.6	96.2%
Net debt (excluding IFRS 16)	**8,676.9**	**8,953.9**	**(277.0)**	**-3.1%**
Lease liabilities	1,474.3	–	1,474.3	N/A
Net debt	**10,151.2**	**8,953.9**	**1,197.3**	**13.4%**

(a) At December 31, 2019, the amounts on this line are reclassified as lease liabilities following the application of IFRS 16.

Net debt amounted to EUR 10,151 million as of December 31, 2019, compared to EUR 8,954 million as of December 31, 2018, a +EUR 1,197 million increase.

Key transactions that led to an increase of net debt are the following:

- the payment of cash dividends to shareholders of SUEZ amounting to EUR 401.8 million;
- the payment of coupons on the various Undated Deeply Subordinated Notes for a total amount of EUR 47.1 million;
- the payment of cash dividends to minority shareholders of subsidiaries amounting to EUR 266.8 million (withholding taxes included);
- the recognition of lease liabilities (IFRS 16) for an amount of EUR 1,442.7 million;
- changes in foreign exchange rates for +EUR 26.2 million, primarily related to the appreciation of the US dollar against the euro.

Key transactions that led to a decrease of net debt are the following:

- excess cash generated by the Group's activities for an amount of EUR 202.9 million;
- the disposal of 20% of SUEZ Group's regulated business activities in the United States for an amount of EUR 510.2 million;

- the net impact of EUR 222.5 million after the SUEZ Group and the Argentinean government settled their dispute over the Buenos Aires water treatment concession terminated in 2006.

Net debt represents 109.3% of total shareholders' equity at the end of 2019 compared to 99.6% at the end of 2018. The net debt over EBITDA ratio was 3.2 at year-end 2019, stable compared to the end of 2018.

As of December 31, 2019, the Group had undrawn confirmed credit facilities for a total of EUR 3,336.4 million.

7.3.3 Return on capital employed (ROCE)

In 2018, ROCE was calculated by dividing net operating profit after taxes (NOPAT) for the period by the opening capital employed adjusted for the scope effects on a prorata temporis basis, as well as for material foreign exchange rate effects.

Current tax used in the calculation of NOPAT was the tax payable on current operations only.

For simplification purposes, a new calculation method has been adopted for the calculation of ROCE as of fiscal year 2019. It is obtained as follows:

$$\frac{(\text{EBIT} - \text{Share in net income of equity-accounted companies}) \times (1 - \text{Normative tax rate}) + \text{Share in net income of equity-accounted companies}}{\text{Average capital employed}}$$

In 2018 and 2019, the normative tax rate for the Group is 34.43%.

The tables below present the calculation of capital employed and return on capital employed for the years 2019 and 2018:

(in millions of euros)	2019	2018
Capital employed as of January 1	18,644.8	18,013.1
IFRS 16 impact	1,372.7	–
Capital employed as of January 1 restated [a]	20,017.5	18,013.1
Capital employed as of December 31	20,365.9	18,644.8
Average capital employed	**20,191.7**	**18,328.9**

(a) The 2019 opening capital employed has been modified compared to those presented in the Reference Document published at December 31, 2018 to take into account the application of IFRS 16 – Leases at January 1, 2019.
NB: For details of the items, see Note 3.4.2 of chapter 18.1 of this Universal Registration Document.

(in millions of euros)	Numerator	Capital employed	ROCE [a]
2019 [b]	991.3	20,191.7	4.9%
2018 restated [c]	941.9	18,328.9	5.1%

(a) To be compared to the weighted average cost of capital (WACC) estimated at 6.3% in 2019 (6.2% in 2018).
(b) 5.2% excluding IFRS 16.
(c) ROCE 2018 has been modified from that presented in the Reference Document published on December 31, 2018 to take into account the new calculation formula applied in 2019.

7.4 Provisions

The table below presents changes in provisions between December 31, 2019 and December 31, 2018:

(in millions of euros)	2019	2018	Change	% Change
Post-employment benefit obligations and other long-term benefits	823.9	805.1	18.8	2.3%
Sector-related risks	20.6	60.8	(40.2)	-66.1%
Warranties	25.9	21.9	4.0	18.3%
Tax risks, other disputes and claims	51.7	79.9	(28.2)	-35.3%
Site restoration	544.1	535.4	8.7	1.6%
Restructuring costs	52.7	49.1	3.6	7.3%
Other contingencies	456.3	451.5	4.8	1.1%
Total provisions	**1,975.2**	**2,003.7**	**(28.5)**	**-1.4%**

The main variation between 2019 and 2018 is:

- the net actuarial gain in provisions for post-employment benefit obligations and other long-term benefits for +EUR 90.6 million; this variation is presented in the "Other" column (see details in Note 19.2.2 of chapter 18.1 of this Universal Registration Document);
- a reversal for utilization of -EUR 87.4 million, due to the defined benefit plans known as "1991" and "1998" – benefiting senior executives of Group entities – and to the closure of the mutual insurance plan in certain French entities to retirees (see Note 19.2.2 of chapter 18.1 of this Universal Registration Document);
- the reclassification of provision for tax risks, of -EUR 22.6 million, in accordance with IFRIC 23 (see "Other" column);
- finally, the reversal of -EUR 23.3 million in "sector-related risk" earlier provisioned for the Aguas Argentinas dispute.

The details regarding these provisions are presented in Note 18 to the Consolidated Financial Statements (chapter 18.1 of this Universal Registration Document).

7.5 Contractual commitments

7.5.1 Commitments relating to Group financing

Financial debt

The Group's total outstanding borrowings and its repayment schedule as of December 31, 2019 are set out in the following table:

(in millions of euros)	Total	2020	2021	2022	2023	Beyond 2023
Total borrowings	11,277.8	1,382.7	1,009.2	783.7	864.0	7,238.2
Bank overdrafts and current accounts	1,133.6	1,133.6	–	–	–	–
Outstanding borrowings	**12,411.4**	**2,516.3**	**1,009.2**	**783.7**	**864.0**	**7,238.2**

Secured, pledged and mortgaged assets

Assets pledged and mortgaged as collateral borrowings amounted to EUR 9.7 million as of December 31, 2019, against EUR 10.6 million as of December 31, 2018.

The maturities of these commitments are as follows:

(in millions of euros)	2019	2018
2019	–	1.0
2020	0.7	0.6
2021	0.1	0.1
2022	–	0.1
2023	–	–
Beyond	8.9	8.8
Total	**9.7**	**10.6**

Financing commitments

The following table presents financing commitments provided or received by the Group for the fiscal years ended December 31, 2019 and 2018:

(in millions of euros)	2019	2018
Personal securities provided for borrowings	930.1	1,015.8
Total commitments given	**930.1**	**1,015.8**
Financing commitments received	3,336.4	2,290.7
Total commitments received	**3,336.4**	**2,290.7**

Commitments received related to financing mainly concern undrawn confirmed credit facilities.

Personal securities cover the repayment of the principal amount and interest on the debt: the latter is not recognized as a liability on the Group's statement of financial position. Guarantees are also provided in the context of the receivables securitization program for EUR 356 million.

7.5.2 Contractual investment commitments

Contractual commitments to invest in property, plant, and equipment

In the ordinary course of their business activities, certain Group companies have also entered into commitments to purchase, and related third parties to deliver property, plant and equipment. These commitments break down by maturity as follows:

(in millions of euros)	2019	2018
2019	–	214.1
2020	338.2	96.7
2021	118.7	55.3
Beyond	176.1	80.5
Total	**633.0**	**446.6**

The increase observed from 2018 to 2019 primarily stemmed from an increase in property, plant and equipment investment commitments at R&R France.

Other contractual investment commitments

The Group has made various investment commitments in intangible assets, and, to a lesser extent in equity interest purchases, for a total of EUR 320 million as of December 31, 2019.

These investment commitments amounted to EUR 268 million as of December 31, 2018.

7.5.3 Operation-related commitments given

Operation-related commitments given amounted to EUR 4.0 billion as of December 31, 2019, compared to EUR 3.6 billion as of December 31, 2018. They concern guarantees given by the Group with respect to contracts and markets, including bid bonds accompanying tender offers, advance payment bonds and completion or performance bonds given in the context of signing contracts or concession arrangements. The EUR 0.4 billion increase is due to new guarantees given, particularly at SUEZ Groupe and SUEZ Water Inc. in the United States.

7.6 Parent Company financial statements

See chapter 18.3 of this Universal Registration Document, which also includes the position of accounts payable by maturity.

7.7 Outlook

See section 5.4.4 of this Universal Registration Document.

8 Cash and shareholders' equity

8.1 Company shareholders' equity

Total shareholders' equity as of December 31, 2019 amounted to EUR 9,288.2 million, up EUR 295.6 million compared to December 31, 2018. This change notably includes the impact of dividend payments in cash for fiscal year 2018 in the amount of -EUR 661.5 million and -EUR 47.1 million paid as coupon relating to undated deeply subordinated notes. It also includes foreign exchange adjustments (-EUR 15.6 million), changes in actuarial gains and losses (-EUR 90.6 million), and net income for fiscal year 2019 (+EUR 609.2 million).

Group net debt (including amortized cost and impact of derivative instruments) was EUR 10,151 million as of December 31, 2019, *versus* EUR 8,954 million as of December 31, 2018. Consequently, the net debt/EBITDA ratio was 3.2 as of December 31, 2019 (this ratio takes into account the application of IFRS 16 as of January 1, 2019).

8.2 Source and amount of the issuer's cash flows and description of cash flows

8.2.1 Cash flows from operating activities

CASH FLOWS FROM OPERATIONS BEFORE FINANCIAL INCOME/(EXPENSE) AND INCOME TAX

(in millions of euros)	2019	2018	Gross change as a %
Water Europe	946.6	875.8	8.1%
Recycling and Recovery Europe	688.3	484.9	41.9%
International	803.5	668.7	20.2%
WTS	220.8	216.9	1.8%
Other	197.6	30.4	N/A
Total	**2,856.8**	**2,276.7**	**25.5%**

Cash flows from operations before financial income/(expense) and income tax came to EUR 2,856.8 million as of December 31, 2019, up +25.5% compared to 2018.

In total, cash flows from operating activities generated a cash surplus of nearly EUR 2.5 billion in 2019.

8.2.2 Cash flows from investing activities

Cash flows from investing activities in 2019 totaled EUR 1,454.6 million and included:

- financial investments of EUR 88.6 million (EUR 146.4 million in 2018), including EUR 12.6 million for acquisitions in the Recycling and Recovery Europe segment, EUR 66.6 million in the International segment and EUR 9.4 million in the Other segment;
- maintenance capital expenditure of EUR 662.5 million (EUR 606.8 million in 2018), including EUR 195.2 million for the Water Europe segment, EUR 193.3 million for the Recycling & Recovery Europe segment, EUR 201.8 million for the International segment, EUR 50.6 million for the WTS segment, and EUR 21.6 million for the Other segment;
- development capital expenditure of EUR 754.8 million (EUR 736.1 million in 2018), broken down by segment as follows: EUR 237.4 million for the Water Europe segment, EUR 179.3 million for the Recycling & Recovery Europe segment, EUR 292.7 million for the International segment and EUR 45.4 million for the WTS segment.

Disposals in 2019 represent EUR 137.7 million, *versus* EUR 245.2 million in 2018. The primary transactions impacting the disposals for fiscal year 2019 are described in Note 2 to the Consolidated Financial Statements, in chapter 18.1 of this Universal Registration Document.

In total, cash flows from investing activities result in a cash outflow of EUR 1,454.6 million in 2019, *versus* an outflow of EUR 1,230.3 million in 2018.

8.2.3 Cash flows from financing activities

This figure includes the dividends paid in cash for 2019 of EUR 715.6 million [1] (compared to EUR 696.1 million in 2018). These include dividends paid by SUEZ to its shareholders in the amount of EUR 401.8 million, as well as the EUR 47.1 million coupon for the subordinated notes. It also includes the dividends paid by certain subsidiaries to non-controlling interests in the amount of EUR 256.2 million and withholding taxes in the amount of EUR 10.6 million. Net financial interest paid totaled EUR 352.3 million in 2019, *versus* EUR 365.9 million in 2018.

In total, cash flows from financing activities resulted in an outflow of EUR 860.7 million in 2019, *versus* an outflow of EUR 593.0 million in 2018.

8.3 Borrowing terms and issuer's financing structure

8.3.1 Debt structure

Outstanding borrowings (excluding amortized cost and the effect of derivatives) as of December 31, 2019 was EUR 12,411 million, *versus* EUR 12,452 million as of December 31, 2018, and breaks down as follows:

- bonds (mainly subscribed by the parent company SUEZ) in the amount of EUR 9,475 million (EUR 9,766 million in 2018);
- commercial paper in the amount of EUR 678 million (EUR 642 million in 2018);
- bank borrowings in the amount of EUR 903 million (EUR 804 million in 2018); and
- other borrowings and current accounts totaling EUR 1,355 million (EUR 1,240 million in 2018).

Including amortized cost and the impact of derivatives, 52% of net debt was denominated in euros, 27% in US dollars, 6% in pound sterling, 12% in Chilean pesos and 2% in Hong Kong dollars at the end of 2019. In 2018, it was 43% denominated in euros, 29% in US dollars, 5% in pound sterling, 12% in Chilean pesos and 8% in Hong Kong dollars.

58% of outstanding borrowings and 84% of net debt is fixed rate. The Group's 2019 objective was to implement a dynamic distribution between the various reference rates, taking into account changes in the market. The average cost of net debt was 3.95%, *versus* 3.88% in 2018. In 2019, the average term of net debt was 6.9 years.

8.3.2 Major transactions in 2019

On April 8, 2019, SUEZ repaid the EUR 800 million nominal loan issued on April 8, 2009. It bore a coupon of 6.25%.

On October 14, 2019, SUEZ issued new 12-year senior bonds for a total amount of EUR 700 million. The new bonds will bear interest at a fixed rate of a 0.500% per year.

The funds raised have been allocated to refinance the partial buyback of existing bonds:

- EUR 151.8 million of an initial amount of EUR 750 million with a 4.078% coupon, maturing in 2021;
- EUR 135.3 million of an initial amount of EUR 750 million with a 4.125% coupon, maturing in 2022;
- EUR 123.6 million of an initial amount of EUR 500 million with a 2.750% coupon, maturing in 2023;
- EUR 39.0 million of an initial amount of EUR 500 million with a 5.500% coupon, maturing in 2024;

for a total nominal amount of EUR 449.7 million.

On September 12, 2019, SUEZ issued new Undated Deeply Subordinated Notes for a total amount of EUR 500 million. The new notes will bear interest at a fixed rate of 1.625%, revised for the first time seven years after issue, then every five years. The funds raised have been allocated to buyback the notes issued in June 2014 for an amount of around EUR 352 million.

As of December 31, 2019, the outstanding amount of Undated Deeply Subordinated Notes is EUR 1,747.9 million, compared with EUR 1,600 million as of December 31, 2018.

(1) The EUR 715.6 million above correspond to the dividends and coupons of undated deeply subordinated notes paid in cash in 2019, while the EUR 708.6 million presented in the consolidated statement of changes in shareholders' equity correspond to the dividends approved by shareholders in 2019 (see chapter 18.1 of this Universal Registration Document).

8.3.3 Group rating

SUEZ has its senior debt rated by Moody's rating agency. The rating confirmed on December 5, 2019 is Baa1 for long-term debt and Prime 2 for short-term debt, along with a stable outlook.

Moody's applied the following main adjustment to the Group's net debt: addition of funding shortfall on pension liabilities (see Note 19 of chapter 18.1 of this Universal Registration Document);

8.4 Restrictions on the use of capital

As of December 31, 2019, the Group had undrawn confirmed credit lines (which may be used for such purposes as back-up credit facilities for the commercial paper program) totaling EUR 3,336.4 million.

Some loans contracted by Group subsidiaries or by SUEZ on behalf of its subsidiaries include clauses requiring specific ratios to be maintained. Such ratios, as well as their levels, are known as financial covenants and are agreed to with the lenders, and may be revised during the term of the loan. The liquidity risk arising from the Group's possible breach of financial covenants is described in section 8.6.3.

For most loans relating to subsidiaries and involving negotiation of financial covenants, the lending banks usually require the relevant company to comply with a maximum level of indebtedness measured by a ratio called "Leverage", or a minimum level of debt coverage (with respect to the principal amount and interest), which is measured by the DSCR (debt service cover ratio), or, with respect to interest, by the ISCR (interest service cover ratio).

With regard to project financing, lending banks may also require that the relevant company maintains an actuarial ratio for debt coverage for the remaining term of the loan, called the LLCR (loan life cover ratio). Within the context of other financing, lending banks may also require the relevant company to observe a balance sheet ratio, which generally takes the form of a debt to equity ratio.

The Group has implemented a semi-annual procedure for monitoring its financial covenants that involves the CFOs of the major subsidiaries sending representation letters, indicating (i) whether the subsidiary or other legal entities supervised by this subsidiary have, as of the last reporting date, been in default or potential default situations (situations likely to become default situations contingent upon a decision of the lenders or the expiry of time limits), or (ii) whether default or potential default situations may occur at the next half-year closing. The letters of representation must include an appendix listing the loan agreements, including covenants, types of covenants, and the consequences to the borrower in the event of a breach of such covenants.

8.5 Expected sources of financing to meet commitments relating to investment decisions

8.5.1 Contractual commitments

The following table shows outstanding borrowings maturities as of December 31, 2019:

	Amount per period				
(in millions of euros)	Less than 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Total
Outstanding borrowings	2,134.7	381.6	3,241.8	6,653.3	12,411.4

8.5.2 Expected sources of financing

As of December 31, 2019, the Group had EUR 2,599.2 million in available cash (consisting of EUR 3,703.0 million in cash and cash equivalents, EUR 29.8 million in financial assets valued at fair value through income, net of bank overdrafts and liabilities current account for EUR 1,133.6 million) and EUR 3,336.4 million in unused confirmed credit facilities, including EUR 287.8 million due to expire in 2020.

The Group anticipates that its future financing needs for major capital investments will be covered by its net cash, future cash flows from operating activities and possibly the use of available credit facilities.

Liquidity as of December 31, 2019 is sufficient to cover medium-term cash requirements and the split between net cash and unused confirmed credit facilities is optimized to minimize carrying costs.

8.6 Market risks

8.6.1 Interest rate risk

The Group's exposure to interest rate risk derives mainly from its floating rate net financial debt. As of December 31, 2019, the Group had net debt[1] (excluding lease liabilities and excluding derivatives and amortized cost) of EUR 8,678.6 million, with -14% at floating rate, 102% at fixed rate and 12% at inflation-indexed fixed rate before hedging, and 5% at floating rate, 83% at fixed rate and 12% at inflation-indexed fixed rate after hedging.

The table below presents the breakdown of the Group's net debt by rate type after hedging as of December 31, 2019:

(in millions of euros)	Total	Net debt at fixed rate	Net debt at floating rate	Net debt at Inflation-indexed fixed rate	Less than 1 year	1 to 5 years	Over 5 years
Amount	8,678.6	7,157.5	438.2	1,082.9	(1,216.5)	3,241.8	6,653.3

The following table shows the Group's net debt position exposed to floating interest rates as of December 31, 2019:

(in millions of euros)	**Total**
Gross debt	2,500.1
Financial assets measured at fair value through income	(29.8)
Cash and cash equivalents	(3,703.0)
Net position before management	**(1,232.7)**
Impact of interest rate derivatives	1,670.9
Net position after management	**438.2**
Impact of a 1% increase in short-term interest rates on income after management	(2.9)

An interest rate risk sensitivity analysis is presented in Note 14.1.3.2 to the Consolidated Financial Statements, chapter 18.1 of this Universal Registration Document.

An increase in interest rates could also force the Group to finance or refinance acquisitions or investments at a higher cost.

The interest rate risk management policy is described in section 8.7.1.

8.6.2 Currency risk

Given the nature of its activities, the Group has limited exposure to currency risk on transactions (except for the WTS division), meaning flows relating to the activities of SUEZ and its subsidiaries are primarily denominated in their local currency.

(1) Refer to section 18.1.6 "Notes to Consolidated Financial Statements", Note 13.3.1 for a reconciliation between net debt and net debt excluding amortized cost and impact of derivative financial instruments.

The geographic diversification of its activities exposes the Group to translation risk, *i.e.*, its financial and income statements are sensitive to foreign exchange rate fluctuations when consolidating the accounts of foreign subsidiaries outside the Eurozone. As a result, fluctuation in the value of the euro against these various currencies may affect the value of these items in its financial statements, even if their intrinsic value has not changed in their original currency. In addition, the Group implements currency hedges to create synthetic debt in foreign currency based on the euro, mainly to fund some of its foreign subsidiaries.

The following table shows the distribution of the Group's net debt by currency as of December 31, 2019 (excluding lease liabilities and including impact of derivatives and amortized cost):

(in millions of euros)	Euro [a]	US dollar	Pound sterling	Chilean peso	Hong Kong dollar	Other	Total
Net debt before the effects of forex derivatives	6,682.2	992.6	268.2	1,019.6	39.4	(325.1)	8,676.9
Net debt after the effects of forex derivatives	4,511.4	2,354.9	477.7	1,019.7	180.8	132.4	8,676.9
Impact on income of a 10% net appreciation of the euro on net position after management	0.2	(2.6)	–	(0.5)	(0.5)	(3.1)	(6.5)

(a) The euro impact comes from the net euro position of Group entities whose operating currency is not the euro. The share of net financial debt in euros declines after the effects of forex derivatives due to the Group's use of a portion of its debt in euros to create synthetic debt in foreign currency and to finance foreign subsidiaries, mainly in US dollars and Hong Kong dollars.

The following table shows the distribution of the Group's capital employed by currency as of December 31, 2019:

(in millions of euros)	Euro [a]	US dollar	Pound sterling	Other [b]	Total
Capital employed	9,775.4	6,239.3	1,161.9	3,189.3	20,365.9

(a) Euro: including SUEZ Spain and its subsidiaries.
(b) Mainly the Australian dollar, Czech koruna, yuan, Hong Kong dollar and Swedish krona.

With respect to the US dollar, the table below presents the impact of changes in US dollar exchange rates between 2019 and 2018 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2019:

(in millions of euros)	Change
Revenues	111.1
EBITDA	19.8
Net debt	18.4
Total shareholders' equity	63.1

Revenue and EBITDA calculations were based on an average USD/EUR rate variation from 2018 to 2019 (+5.5%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the USD/EUR closing rate on December 31, 2019 and 2018 (+1.9%).

With respect to the pound sterling, the table below presents the impact of changes in pound sterling exchange rates between 2019 and 2018 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2019:

(in millions of euros)	Change
Revenues	8.2
EBITDA	(0.9)
Net debt	22.1
Total shareholders' equity	20.9

Revenue and EBITDA calculations were based on an average GBP/EUR rate variation from 2018 to 2019 (+0.8%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the GBP/EUR closing rate on December 31, 2019 and 2018 (+5.1%).

With respect to the Chilean peso, the table below presents the impact of changes in Chilean peso exchange rates between 2019 and 2018 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2019:

(in millions of euros)	Change
Revenues	(26.8)
EBITDA	(15.3)
Net debt	(97.5)
Total shareholders' equity	(0.6)

Revenue and EBITDA calculations were based on an average CLP/EUR rate variation from 2018 to 2019 (-3.7%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the CLP/EUR closing rate on December 31, 2019 and 2018 (-5.8%).

With respect to the Hong Kong dollar, the following table presents the impact of changes in Hong Kong dollar exchange rates between 2019 and 2018 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2019:

(in millions of euros)	Change
Revenues	12.4
EBITDA	1.4
Net debt	11.3
Total shareholders' equity	24.9

Revenue and EBITDA calculations were based on an average HKD/EUR rate variation from 2018 to 2019 (+5.5%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the HKD/EUR closing rate on December 31, 2019 and 2018 (+2.5%).

An exchange rate sensitivity risk analysis appears in Note 14.1.2.2 to the Consolidated Financial Statements, in chapter 18.1 of this Universal Registration Document. The foreign exchange rate risk management policy is described in section 8.7.2.

8.6.3 Liquidity risk

The table below presents the maturity schedule for the Group's borrowings and the amount of its cash as of December 31, 2019:

(in millions of euros)	Total	2020	2021	2022	2023	Beyond 2023
Total borrowings	11,277.8	1,382.7	1,009.2	783.7	864.0	7,238.2
Overdrafts and current cash accounts	1,133.6	1,133.6	–	–	–	–
Total outstanding borrowings	**12,411.4**	**2,516.3**	**1,009.2**	**783.7**	**864.0**	**7,238.2**
Financial assets measured at fair value through income	(29.8)	(29.8)	–	–	–	–
Liquid financial investments	(130.0)	(130.0)	–	–	–	
Cash and cash equivalents	(3,573.0)	(3,573.0)	–	–	–	–
Net debt (excluding lease liabilities and excluding impact of derivative financial instruments and amortized cost)	**8,678.6**	**(1,216.5)**	**1,009.2**	**783.7**	**864.0**	**7,238.2**

Some borrowings contracted by Group subsidiaries, or by SUEZ Group on behalf of its subsidiaries, include clauses requiring certain ratios to be maintained. The definition and level of these ratios, that is, the financial covenants, are determined in agreement with the lenders and may potentially be revised during the term of the loan. Information about these covenants is presented in chapter 8.4 of this Universal Registration Document. As of December 31, 2019, 17% of borrowings exceeding EUR 50 million were subject to financial covenants. Failure to comply with these covenants could lead lenders to declare a covenant event of default and demand early repayment. As of December 31, 2019, and as of the date of this Universal Registration Document, none of these clauses has been activated. The Company also believes that the existence of these covenants does not have a material impact on the Group's financial position. Finally, none of these financial covenants is based on SUEZ Group's or SUEZ's share price, or on the Group's rating. Details on short- and long-term ratings and their evolution over the course of fiscal year 2019 appear in section 8.3.3 of this document. As of the date of this Universal Registration Document, there is no payment default on the Group's consolidated debt. There was also no payment default on the Group's consolidated debt as of December 31, 2019.

The following table shows borrowings contracted by the Group as of December 31, 2019, in excess of EUR 50 million:

Type	Fixed/floating rate	Total amount of lines as of December 31, 2019 *(in millions of euros)*	Amount used as of December 31, 2019 *(in millions of euros)*	Maturity
Bond issues	Fixed rate	700	700	2029
Bond issues	Fixed rate	700	700	2031
Bond issues	Fixed rate	615	615	2022
Bond issues	Fixed rate	598	598	2021
Bond issues	Fixed rate	500	500	2025
Bond issues	Fixed rate	500	500	2028
Bond issues	Fixed rate	500	500	2025
Bond issues	Fixed rate	500	500	2032
Bond issues	Fixed rate	500	500	2030
Bond issues	Fixed rate	461	461	2024
Bond issues	Fixed rate	376	376	2023
Bond issues	Fixed rate	311	311	2020
Bond issues	Fixed rate	294	294	2030
Bond issues	Fixed rate	250	250	2027
Bond issues	Fixed rate	200	200	2021
Bond issues	Floating rate	164	164	2034
Bond issues	Fixed rate	134	134	2034
Bond issues	Fixed rate	111	111	2035
Bond issues	Fixed rate	100	100	2033
Bond issues	Fixed rate	100	100	2020
Draw-downs on credit facilities	Floating rate	90	90	2020
Other borrowings	Fixed rate	86	86	2021
Bond issues	Floating rate	77	77	2035
Bond issues	Floating rate	77	77	2037
Bond issues	Fixed rate	75	75	2029
Draw-downs on credit facilities	Floating rate	70	70	2020
Bond issues	Floating rate	67	67	2036
Bond issues	Floating rate	67	67	2037
Bond issues	Floating rate	67	67	2040

Type	Fixed/floating rate	Total amount of lines as of December 31, 2019 *(in millions of euros)*	Amount used as of December 31, 2019 *(in millions of euros)*	Maturity
Bond issues	Fixed rate	67	67	2047
Bond issues	Floating rate	67	–	2043
Bond issues	Floating rate	67	67	2044
Bond issues	Fixed rate	67	67	2030
Bond issues	Fixed rate	67	67	2031
Bond issues	Fixed rate	62	62	2032
Other bank borrowings	Floating rate	61	61	2020
Bond issues	Floating rate	59	59	2031
Bond issues	Fixed rate	58	58	2033
Bond issues	Fixed rate	58	58	2048
Bond issues	Floating rate	55	55	2032
Bond issues	Floating rate	54	54	2038
Draw-downs on credit facilities	Floating rate	53	53	2020
Bond issues	Fixed rate	50	50	2030
Bond issues	Floating rate	50	50	2033
Bond issues	Floating rate	50	50	2025

As of December 31, 2019, the Group had the following unused confirmed credit facilities available:

Year of expiration	Confirmed but unused credit facility programs *(in millions of euros)*
2020	287.8
2021	75.1
2022	89.5
2023	156.0
2024	2,722.5
Beyond	5.5
Total	**3,336.4**

These credit facility programs include a syndicated loan of EUR 2.5 billion in the name of SUEZ, the maturity of which was extended to April 2024. The liquidity risk management policy is described in section 8.7.3.

8.6.4 Counterparty risk

The Group's exposure to counterparty risk is linked to its cash investments and its use of derivatives to control its exposure in certain markets.

The Group's surplus cash is invested in short-term deposits and interest-bearing current accounts with international banks with a minimum BBB+ rating (Standard & Poor's rating), while ensuring that its counterparty diversification policy is stricter and more limiting in terms of counterparty selection.

The derivative financial instruments used by the Group are intended to manage its exposure to currency and interest rate risks, as well as its risks related to commodities. The financial instruments used are essentially forward purchases and sales as well as derivative products.

The counterparty risk management policy is described in section 8.7.4.

8.6.5 Equity risk

The Group has equity interests in publicly traded companies, the value of which changes depending on trends in global stock markets, the performance of these companies and how the markets perceive them.

As of December 31, 2019, the Group held shares in listed companies for a market and book value of EUR 22.2 million. An overall 10% drop in the value of these shares with regard to their price on December 31, 2019 would have had an impact of approximately EUR 2.2 million on the Group share of the shareholders' equity.

The equity risk management policy is described in section 8.7.5.

8.6.6 Risks linked to price fluctuations of certain commodities and energy

The Group's activities use commodities and energy, especially diesel and electricity, so it is exposed to any fluctuations in their prices.

The Group's contracts generally provide for indexation mechanisms, particularly in long-term contracts. The Group cannot guarantee that such mechanisms will cover all of the additional costs generated by increases in electricity and oil prices. In addition, some contracts entered into by the Group do not include indexing provisions. Accordingly, any major increase in the price of electricity or oil could have a negative impact on the Group's earnings and outlook.

In addition, the Group's waste activities produce plastic, wood, cardboard, metals and electricity. A significant reduction in their price could affect the profitability of certain investments or the economic balance of certain contracts and have a negative impact on the Group's operations, earnings and outlook.

8.7 Management of market risks

In the context of its operating and financial activities, the Group is exposed to market risks such as interest rate risks, currency risks, liquidity risks, or the risk related to certain commodity prices. To ensure greater control of these risks, the Group has implemented the management rules described below.

Market risk management issues are presented at a monthly Treasury Committee meeting chaired by the Chief Financial Officer and decisions regarding the management of these risks are taken by this Committee.

The Group primarily uses financial instruments to manage its exposure to fluctuations in interest rates, exchange rates and commodity prices.

8.7.1 Management of interest rate risk

The Group's exposure to interest rate risk is described in section 8.6.1.

The Group's policy is to diversify net debt interest rate references between fixed and floating rates. The aim is to achieve a balanced distribution among various interest rates and maturities.

The Group also uses hedging instruments (particularly swaps) to protect itself from interest rate fluctuations in the currencies in which its debt is denominated. The financial instruments held by the Group in order to hedge interest rate risk are detailed in Note 14.1.4 to the Group's Consolidated Financial Statements, chapter 18.1 of this Universal Registration Document.

The Group's exposure to interest rate risk is for the most part centrally managed and regularly reviewed during meetings of the Treasury Committee. Hedges decided upon by the Treasury Committee are executed and implemented on behalf of the Group by its Treasury and Capital Markets Department.

8.7.2 Management of currency risk

The currency risk to which the Group is exposed is detailed in section 8.6.2.

The geographic diversification of its activities exposes the Group to currency risk. Its statement of financial position and income statement are impacted by changes in exchange rates. Currency risk includes:

- transaction risk associated with purchases and sales made by the Group;
- transaction risk associated with sale and acquisition transactions;
- fair value risk associated with construction contracts;
- currency risk related to assets and liabilities denominated in a foreign currency, including loans and borrowings taken out by subsidiaries;
- consolidation risk, which arises when consolidating the financial statements of subsidiaries with a reporting currency other than the euro.

The financial instruments held by the Group to hedge currency risk are detailed in Note 14.1.4 to the Consolidated Financial Statements, chapter 18.1 of this Universal Registration Document.

The Group's exposure to currency risk is for the most part centrally managed and regularly reviewed at meetings of the Treasury Committee. Hedges decided upon by the Treasury Committee are executed and implemented on behalf of the Group by its Treasury and Capital Markets Department.

8.7.3 Management of liquidity risk

The liquidity risk to which the Group is exposed is described in section 8.6.3.

The Group's 2019 financing policy had the following objectives:

- diversifying financing sources through the use of banking and capital markets;
- optimizing financing costs;
- balancing the repayment profile of financial debt.

As of December 31, 2019, following different transactions made throughout the year as described in chapter 8 of this Universal Registration Document, bank loans accounted for 8.0% of total outstanding borrowings (excluding bank overdrafts and short-term borrowings, as these items do not constitute sustainable financial resources). Financing through capital markets represented 90.0% of this total (84.0% for bonds and 6.0% for commercial paper).

Net cash amounted to EUR 3,888.1 million as of December 31, 2019, and confirmed credit facilities reached EUR 3,682.3 million, EUR 345.9 million of which had been drawn down.

Available cash and cash equivalents (EUR 3,703.0 million), financial assets carried at fair value through income (EUR 29.8 million), net of bank overdrafts and short-term borrowings (EUR 1,133.6 million), totaled EUR 2,599.2 million as of December 31, 2019.

The Group's total liquidity as of December 31, 2019 is compatible with its size and the maturities it faces.

Liquidity risk is regularly monitored by the Treasury Committee and the Audit Committee; monthly reporting of consolidated Group debt includes a debt schedule for the current year, years y+1 to y+8 and beyond.

Access to long-term capital markets is mostly concentrated in the Parent Company SUEZ for new bond and structured bank debt.

8.7.4 Management of counterparty risk

The counterparty risk to which the Group is exposed is described in section 8.6.4.

The Group's policy for managing counterparty risk is based on the diversification of its counterparties and an assessment of the financial position of these counterparties.

The Group invests the majority of its cash surplus in, and negotiates its financial hedging instruments with, leading counterparties. Within the framework of its counterparty risk management policy, the Group has implemented management and control procedures based, on the one hand, on counterparty accreditation according to external rating and objective market aspects (credit default swaps, stock market capitalization), and on the other hand, on the definition of risk limits. Similarly, the Group selects its insurers in a way that limits its counterparty risk.

8.7.5 Management of equity risk

The equity risk to which the Group is exposed is described in section 8.6.5.

The Group's portfolio of listed equities is part of its long-term investment policy. As of the date of this Universal Registration Document, equity risk is not subject to any particular hedging, but the Finance Department monitors price changes in the Group's equity interests in various companies on a regular basis.

8.7.6 Management of commodity and energy risks

The commodity risk to which the Group is exposed is described in section 8.6.6.

The Group's hedging policy mostly concerns the risk associated with oil price fluctuations, in particular due to the fuel consumption of its main subsidiaries active in the waste management sector (SUEZ R&R France, SUEZ Deutschland, SUEZ Recycling & Recovery Netherlands).

Volumes that are not purchased under contracts where revenues are indexed to the change in diesel prices are considered "at risk" volumes and are financially hedged through the use of derivative products, particularly swaps (see section 18.1.6, "Notes to the Consolidated Financial Statements", Notes 1.5.9.3 and 14.1.1).

In order to best implement the planned hedges, the Group's Treasury and Capital Markets Department monitors changes in the market and hedging prices and makes recommendations to the Treasury Committee and to the subsidiaries concerned.

9 Legal and regulatory framework

The Group's regulatory framework derives both from interdisciplinary regulations and regulations specifically related to the business lines.

The Group's activities in Europe are governed by European legislation (European regulations, which apply directly and uniformly to all Member States, or European Directives that must be translated into domestic law) and by legislative provisions specific to each country.

The Group's activities outside Europe are also subject to regulations on the environment, Health and Safety, among other things.

A general presentation of the most significant applicable regulations is set out below.

9.1 Interdisciplinary regulations

9.1.1 Regulations on the awarding of public contracts

Generally, methods for awarding contracts vary depending on the nature of the public-private partnership (long-term concession of public services, PFI in the United Kingdom, BOT, or short-term provision of service) or the method of regulation. A clear definition of the regulatory framework is of the utmost importance for growth of the Group's activities.

A) EUROPEAN REGULATIONS

In the European Union, contracts signed by the Group with local public authorities are classified as either public works or services contracts, or concession contracts. In contrast to a public contract, a concession is defined as a right to operate a public service, with transfer of a portion of the risks borne by the delegating authority to the delegated agent.

On February 26, 2014, the European Council and Parliament adopted the Directives 2014/24/EU and 2014/25/EU on the coordination of public procurement procedures in connection with the award of contracts for public works, supplies and services, particularly in the water, energy transportation and postal services sectors.

These Directives aim to harmonize the procedures for awarding public works, supply and services contracts beyond certain thresholds, and to make procurement procedures more flexible. They regulate the tendering process governing the technical specifications, award criteria, procurement procedures and advertising rules. They apply to the majority of contracts between SUEZ and public authorities.

In addition to these two Directives on public contracts, the EU has also adopted a Directive on the award of concession contracts (2014/23/EU) to define the rules governing the signing of concession contracts between a private economic operator and a public entity (contracting authority and/or contracting entity). Among other things, the Directive regulates the application threshold, the duration of contracts, the award criteria and the relationship between the public authorities and co-contractors over which they exercise similar controls to those that govern their own departments, called "in-house" relationships. It should be noted that the water sector (drinking water and wastewater treatment) is excluded from the scope of application of this Directive.

Member States had until April 2016 to translate these three Directives into law. However, some states have only recently translated these Directives (Spain, Slovenia, Austria). The Commission is now conducting a dialogue with some 15 Member States to check the conformity of their national law with these Directives.

The Commission was expected to review the initial effects of these three Directives, and particularly the exclusion of the water sector from the Concessions Directive in a report to the European Parliament and Council before April 2019. However, given that some Member States did not comply with the deadline to translate the Directives into law, the European Commission is now estimating a two-year delay, at minimum. The second progress report on the application of the Concessions Directive scheduled for 2021 is also uncertain now.

B) FRENCH REGULATIONS

French regulations in the area of public contracts have been revised as part of the effort to translate the European Directives mentioned above. The new legislation that came into effect on April 1, 2016 includes:

- Ordinance 2015-899 of July 23, 2015 relating to public contracts and Decree 2016-360 of March 25, 2016 relating to public contracts are the translations of European Directives relating to public contracts;
- Ordinance 2016-65 of January 29, 2016 relating to concession contracts and Decree 2016-86 of February 1, 2016 relating to concession contracts translated Directive 2014/23/EU relating to the award of concession contracts. The procedure to be used in awarding these contracts is a negotiated procedure. These contracts are particularly used in the water sector; local authorities (municipalities or groupings of municipalities) have the choice between direct control, the public services market, or delegation of public service (DPS). In the case of DPS contracts, the delegated management contract defines the respective obligations of the delegated agent and the delegating party, as well as the pricing policy; there is no transfer of ownership of public works to the delegated agent (which is only the operator); the latter is required to provide an annual technical and Financial Report to the contracting authority;
- Decree 2017-516 of April 10, 2017 relating to various provisions for public procurement amends Decree 2016-360 of March 25, 2016 pertaining to public contracts, called the "Public Contracts" Decree, particularly in the following areas:
  - new obligation for all purchasers subject to the French "MOP Law" to organize bidding contests for awarding their project management public contracts,
  - elimination of the obligation to produce a criminal record check at the time of application. Now a simple sworn statement is sufficient,

  - elimination of the obligation to make essential data about the contract available electronically for contracts under EUR 25,000,
  - elimination of local authority's obligation to conduct a comparative assessment of how a project will be completed for projects over EUR 100 million,
  - clarification as to the possibility to organize a bidding process with competitive negotiation or dialog when only irregular or unacceptable offers are presented after an initial call for tenders;
- the Decree of May 5, 2017 defines the content of project management assignments for comprehensive public contracts. This legislation is enacted in accordance with Law 2016-925 of July 7, 2016 relating to creative freedom, architecture and cultural heritage. The following types of comprehensive public contracts fall under the purview of this decree: design-build public contracts; comprehensive public performance contracts; industry-specific comprehensive public contracts when they include design components and relate to construction work. This decree requires applicants bidding on a comprehensive public contract to identify a project management team. In addition, Law 2014-744 of July 1, 2014 established a new mechanism for institutional partnership between the public sector and private operators, called a Unified Public Private Partnership (in France, a *Société d'économie mixte à opération unique*, or "Semop"). Using a Semop allows local authorities, *via* a single tendering procedure, to select a private shareholder to form a limited company, which will be directly awarded a contract to carry out a specific operation.

C) SPANISH REGULATIONS

In Spain, the award of public contracts is governed by Law 9/2017 of November 8, 2017 on public sector contracts, which translates EU Directive 2014/24.

This law governs the more traditional methods of delegated management (concessions, semi-public entities, regulated and collective management) and requires them to comply with the same public information and competition standards as procurement for public works, services and supply contracts.

It defines the contractual arrangements of the public-private collaboration contract (similar to the French public-private partnership contract). It is intended to meet complex public sector needs, which are not satisfied by traditional contractual agreements, and consists of awarding a company overall responsibility for construction, management, maintenance and replacement, as well as contributing to financing the project.

In addition to Law 9/2017, the Spanish government approved Royal Decree-Law 3/2020 of February 4, 2020, which translates, among others, European Directive 2014/25 which governs the procurement procedures of entities operating in the water, energy, transportation and postal services sectors. This law defines the procedures to be applied by the entities operating in these sectors for public works services and supply contracts.

The Decree-Law will take effect on February 25, 2020 but on February 20, 2020 the Parliament voted to treat this law as a draft bill *via* an urgent procedure, so the legislative text could be amended by various parliamentary groups in the coming days.

D) UNITED STATES REGULATIONS

In the United States, the federal government plays a role in the water sector, but the individual states retain authority in the areas of resource management, regulation of services and investment planning. There are two broad, coexisting contract methods: a regulated method, comparable to the UK system, in which the assets belong to the operator, and a non-regulated mode, in which the local authority entrusts the management of its assets to an operator following competitive bidding. In regulated activities, each state has a Public Utility Commission that sets prices (for water and wastewater treatment services), service standards, and the return on shareholders' equity allowed per company operating in the regulated sector. For public-private partnership agreements in the non-regulated sector, the rules for allocation of projects and operating conditions vary for each state and municipality. As a general rule, operators are selected *via* calls for tenders.

E) CHINESE REGULATIONS

There are two laws that currently govern public contracting in China: the law on awarding public contracts and the law on submitting public tenders. While the law on awarding public contracts concerns the purchase of goods and services by national and local government agencies, the law on submitting public tenders controls construction projects financed by the State. These may be large-scale infrastructure projects as well as state-owned company tenders. Putting out calls for tenders is effectively mandatory for certain contracts in the construction sector. The breadth and thresholds of this type of project are determined by the National Development and Reform Commission and by government ministries.

In 2014, the concept of a public-private partnership was expressly recognized in Chinese legislation. The National Development and Reform Commission has since encouraged the formation of public-private partnerships in the areas of energy, transportation, water, conservation, environmental protection, forestry management and urban planning.

In spite of several market access offers and amendments to the law on awarding public contracts in 2014, China has not been able to become part of the World Trade Organization's (WTO) multilateral agreement on public contracts. Negotiations on China's access to this agreement began in 2007. If China is to become party to the WTO agreement, it will have to align its legislation to the agreement, modifying in particular certain provisions of the law awarding public contracts.

9.1.2 General environmental regulations

A) EUROPEAN REGULATIONS

Environmental liability

Directive 2004/35/EC on environmental liability with regard to preventing and remedying environmental damage (translated in France as Law 2008-757 of August 1, 2008) establishes a legal framework for environmental liability founded on the "polluter pays" principle, with a view to preventing and remedying damage to protected species, natural habitats, water resources and land. Damage may be recognized (by administrative bodies) without any evidenced fault, even if the facility that is the source of the damage is compliant with applicable licenses and authorizations. According to the Environmental Liability Directive, the operator is the first party to incur liability. The text of the law does however stipulate non-retroactivity, and will therefore only apply to damage for which the triggering event occurred after April 30, 2007 (the deadline for transposition by Member States).

Particular vigilance is now required with regard to areas in which exceptional habitats and environments are protected: the "ecoregions" identified at world level, the "Natura 2000" sites in Europe and-specific to France-sensitive rivers and corridors or reservoirs of biodiversity defined in the "Grenelle" laws.

In terms of criminal liability, in accordance with Directive 2008/99/EC on the protection of the environment through criminal law, Member States must establish criminal sanctions that are effective, proportionate and dissuasive for serious violations of the provisions of EU law relating to the protection of the environment. This EU law relates in particular to the release of substances or ionizing radiation into air, soil or water, the treatment and transfer of waste, the destruction or capture of specimens of protected species of wild fauna and flora, and the marketing of substances that will weaken the ozone layer.

European pollutant release and transfer register

Regulation 166/2006/EC established a European Pollutant Release and Transfer Register (known as the E-PRTR Register) to monitor the release of pollutants into water, air and soil at EU level (replacing the European Pollutant Emission Register (EPER)). This register, which is an electronic database that has been accessible to the public since November 9, 2009, is aimed at facilitating access to information concerning pollutant emissions. The vast majority of waste and some wastewater treatment activities are affected by this Regulation (although certain thresholds do exist) and, consequently, the operators concerned must provide precise data on their emissions every year (the initial year of reference was 2007). The European Commission planned to assess Regulation 166/2006/EC in 2020/2021 based on effectiveness, consistency, efficiency and how much value European action adds. This Regulation also impacts the Group's hazardous waste business.

Seveso III

The Seveso Directive on the control of major accident hazards involving dangerous substances requires Member States to ensure that all operators concerned by the Directive have implemented a policy for the prevention of major accidents. Operators who handle hazardous substances above certain thresholds are required to regularly inform the public likely to be affected by the consequences of an accident, by establishing safety reports, a safety management system and an internal emergency plan. Directive 2012/18/EU of July 4, 2012, known as "Seveso III" amends and, as from June 1, 2015, replaces the previous Regulation (Directive 96/82/EC of December 9, 1996, known as "Seveso II"). Among other things, it harmonizes the list of chemicals with that of the new classification system for hazardous substances of the CLP Regulation (1272/2008/EC).

REACH

The Reference, Evaluation, Authorization and Restriction of Chemical substances (REACH) Regulation has been in force since June 1, 2007. In order to offer better protection of human and environmental health against risks that may derive from chemical substances, the REACH regulation makes industry responsible for evaluating and managing the risks of the said substances and for providing adequate safety information to users.

REACH involves specific communication throughout the life cycle of substances so as to guarantee regulatory compliance and to ensure that the planned uses (including at end-of-life) are taken into account. Accordingly, the Group-like all those in the industry-must check with its suppliers that the substances it uses in the context of its activities are indeed REACH-compliant.

Since December 1, 2010, companies must also have registered all substances produced above the threshold of 1,000 metric tons per year and per legal entity with the European Chemicals Agency (ECHA), unless the product in question is exempt. The Group's activities are affected by this registration obligation when selling recycled substances (secondary raw materials) that have a product status, as well as for certain substances produced *in situ*. However, the number of substances registered is very low, as the majority of recycled substances sold on the market are exempt due to their similarity with existing substances.

In 2018, the European Commission conducted a second assessment of the implementation of the REACH Regulation. It also launched a public consultation on the links between the legislation on chemical products and waste to prepare for potential new regulations. The results of the public consultation on the articulation between chemicals and waste legislation should be reflected in the future chemicals strategy for sustainability, announced in the framework of the Green Deal, which is expected to be published before the summer of 2020.

The Climate and Energy Package

On December 17, 2008, the European Parliament adopted several proposals aimed at both fighting climate change and guaranteeing the European Union a safer and more sustainable energy supply.

The "Climate and Energy Package", as it is commonly known, brings together:

- a Directive that modifies and extends the greenhouse gas emissions trading scheme, from which Group facilities in the water and waste sectors are currently excluded;

- a decision relating to the distribution of effort among Member States in domains that are not covered by this scheme, such as transport, construction or environmental services;
- a Directive intended to promote renewable energies, such as biogas and energy produced from waste biomass and wastewater treatment byproducts;
- a Directive on the geological storage of CO_2;
- new guidelines concerning state aid for the conservation of the environment, published April 1, 2008 and aimed at supporting the investment effort necessary to achieve these objectives as set forth in the aforementioned laws.

This initiative is part of the ambitious "climate" action plan, adopted by the European Council in March 2007, whose main recommendations are a European Union commitment to reduce its greenhouse gas emissions by at least 20% between now and 2020, a compulsory objective of 20% of renewable energy in energy consumption within the same time frame, and lastly an increase of 20% in energy effectiveness (program known as "3x20").

On October 23 and 24, 2014, the European Council agreed to reform the package; consequently, it is now known as the "2030 Climate and Energy Package". This agreement is intended to enhance the three targets adopted in 2008 by reducing greenhouse gas emissions by at least 40% (compared to 1990 levels), increasing the percentage of renewable energies to at least 27% and improving energy efficiency by at least 27%.

As part of this Package, in July 2015, the Commission published a proposal for revising the European Emissions Trading Scheme for the 2021 to 2030 period. The main goal is to prompt carbon prices per metric ton to rise by expanding the sectors covered as well as reducing the overall number of quotas, and especially free quotas. This amendment was adopted in February 2018 and came into effect in April 2018. The European Commission has decided to extend until June 15, 2020 the deadlines for Directives that should have been transposed since July 2019.

In November 2016, a proposal to adopt a "clean energy" package was added to the "2030 Climate and Energy Package". The "Energy Performance of Buildings" Directive was adopted in May 2018. In early December 2018, Directives were adopted on Energy efficiency (with a goal of improving energy efficiency by 32.5% by 2030), renewable energy (with a goal of obtaining 32% renewable energy in the European energy mix by 2030), and governance. Member States have until June 30, 2021 to transpose the provisions of these Directives into national law.

All of these goals are part of the more long-term strategy for a competitive, low-carbon economy by 2050, published by the Commission on November 28, 2018.

The European Green Deal – a global compact for climate action and sustainability

In response to climate and environmental challenges, on December 11, 2019, the European Commission introduced the Green Deal, which includes around 50 measures with ambitious targets: more rigorous climate goals for 2030 and 2050 (climate neutrality); a modern and sustainable European economy that generates jobs; an industrial policy based on the circular economy; and a "pollution-free environment with zero toxic substances".

A very ambitious legislative calendar came with the Green Deal major announcements, including legislative measures and proposals that could potentially impact the Group. The schedule for 2020 includes the following measures:

January 2020
- Just Transition Mechanism proposal, including a Just Transition Fund and a Sustainable Europe Investment Plan.

March 2020
- a European Climate Law setting the goal to become climate-neutral by 2050;
- a Circular Economy Action Plan (focusing on the textile, construction, electronic and plastic industries);
- a new European Industrial Strategy;
- a European Biodiversity Strategy 2030.

Spring/Summer 2020
- European Farm to Fork Strategy;
- European chemicals strategy for sustainability.

Fall 2020
- legislation on batteries supporting the sustainable and circular value chain.

B) FRENCH REGULATIONS

Energy and Climate Act

The Energy and Climate Act of November 8, 2019 aims to respond to the ecological and climate crisis. The law records this crisis in the Energy Code along with the goal to be carbon neutral by 2050, cutting GHG emissions down by a factor of at least six by this date.

The major objectives of France's energy policy are as follows:

- achieve carbon neutrality by 2050;
- reduce fossil fuel consumption by 40% by 2030;
- shut down the remaining four French coal power plants in 2022;
- postpone reducing nuclear energy to 50% (*versus* more than 70% currently) by ten years to 2035;
- develop low-carbon and renewable hydrogen, which must account for around 20 to 40% of total hydrogen and industrial hydrogen consumption by 2030.

The multi-annual energy program (PPE) and national low-carbon strategy (SNBC) are expected in early 2020.

Law to re-establish biodiversity, nature and landscapes

Law 2016-1087 of August 8, 2016, the so-called biodiversity law, introduces several new items:

- the recognition of ecological damage;
- the principle of ecological solidarity;
- the non-regression of environmental law;
- the mitigation of environmental damages.

The biodiversity law highlights the transition from a fixed vision to a full and dynamic vision of biodiversity. Biodiversity is effectively considered as a source of innovation and knowledge of it is inscribed in law as a fundamental objective. According to the law, ecological continuity contributes to sustainable development of regions and consequently must be protected. The sequence "avoid, reduce, mitigate" is reaffirmed regarding regional development projects. In addition, the law addresses agricultural mitigation.

Lastly, the law clarifies roles by designating the region as the level responsible for managing biodiversity.

Act ratifying the ordinance relating to amending the rules applicable to environmental assessment of projects, plans and programs and the ordinance reforming procedures intended to ensure public information and participation in making decisions likely to have an impact on the environment

Ordinance 2016-1058 of August 3, 2016 ratified in March 2018 and Decree 2016-1110 of August 11, 2016 reform environmental assessment. These acts are intended to bolster effectiveness of the participation of the public in decisions that could have an impact on the environment and to modernize consultation procedures. Their purpose is to "ensure that the project preparation process is more transparent and that there is better participation by the public in this process". This is to address inadequacies in the transposition of Directive 2014/52/EU relating to the environmental evaluation of projects, raised by a reasoned opinion of the European Commission in March 2015.

Accordingly, a distinction is now drawn between projects systematically subject to environmental evaluations and projects subject to these evaluations on a case-by-case basis. It should be noted that innovative projects will be systematically subject to a case-by-case review procedure.

Clarifications are provided with regard to impact studies, which should include a description of the vulnerability of a project to climate change and present a "benchmark scenario", and especially a view of probable changes in the environment should the project not be implemented. Details of mitigation measures are also set out.

These actions also confirm the "by project" approach, as opposed to a "by procedure" method. The project concept is defined without resorting to the concept of "work program". Furthermore, shared or coordinated environmental evaluations procedures are set up between projects, or between projects and planning documents.

Decree 2017-626 of April 25, 2017 amends procedures intended to ensure information and public participation in making certain decisions likely to have an impact on the environment, in accordance with Ordinance 2016-1060 dated August 3, 2016 relating to reforming procedures intended to ensure information and public participation in making certain decisions likely to have an impact on the environment.

In particular, the decree provides for setting up public debates on national plans and programs that are subject to environmental assessment.

The decree details arbitration procedures in the event of a dispute between the project owner and one or more approved associations. Implementation of the right to a citizen's initiative to request prior consultation from the prefect is also detailed. The decree calls for the widespread rollout of a digital public consultation process.

Energy Transition for Green Growth Law

Law 2015-992 of August 17, 2015 and the action plans accompanying it are intended to help France make an effective contribution in the fight against climate change and to bolster its energy independence by better balancing its various sources of supply. Among the drivers of this growth, the circular economy is at the center of the Law.

"Grenelle" laws

In order to implement the commitments made in 2007 within the context of France's Grenelle Environment Forum *(Grenelle de l'environnement)*, legislative proposals were adopted in 2009 and 2010, including:

- framework Law 2009-967, relating to the implementation of the Grenelle Environment Forum, known as the "Grenelle I" Law, defined the main guidelines: it translated the "Grenelle" commitments into legal terms;
- Law 2010-788 for a national environmental commitment, known as the "Grenelle II" Law, set out the conditions for implementing the commitments made in 2007.

The "Grenelle" laws and the regulatory provisions supplementing them represented both new obligations and new opportunities for the environmental sector.

In the water sector, the "Grenelle II" Law introduced a large-scale program for regaining water quality by making the various economic players accountable: local authorities must meet wastewater standards, farmers must reduce their use of pesticides, and manufacturers whose activities pollute must fulfill new obligations.

C) SPANISH REGULATIONS

In order to implement the European Directives, several laws regulating environmental protection have been adopted, such as Law 26/2007 of October 23, 2007 on environmental liability, transposing Directive 2004/35/EC; Organic Law 5/2010 of June 22, 2010, which amended the Criminal Code to transpose Directive 2008/99/EC; and Royal Decree-Law 1254/1999 of July 16, 1999, which transposes Directive 96/82/EC. It is noteworthy that following the last environmental review of Spain carried out by the OECD in 2015, Spanish laws on biodiversity are among the most ambitious of the entire OECD area and that the ecological footprint of the country's industrial sector remains relatively indistinct. However, efforts must be made with regard to coordinating the various autonomous communities of the country in relation to the numerous requirements contained in environmental regulations.

D) CHINESE REGULATIONS

The Commission for Reform and National Development published a "Plan for the Promotion of the Circular Economy" in April 2015, in which it enumerated actions to be implemented in industry, agriculture and cities. The Law for the Promotion of the Circular Economy took effect in 2009.

The 13th five-year plan covering the period 2016 to 2020 calls for ambitious initiatives in the environmental area.

In 2014, the Ministry of Environmental Protection issued transparency rules that require environmental protection authorities to make public all non-confidential information contained in environmental impact studies.

Regulations on the protection of the environment strengthened pollution control requirements. The more extensive criminal liability introduced by this reform is an important change because this principle authorizes the Bureau of Environmental Protection to subject violators to combined fines without upper limits. The revised law makes it possible for certain environmental groups to file legal proceedings.

On December 25, 2016, the Permanent Committee of the National People's Congress (NPC) of China adopted the environmental protection law. When it took effect on January 1, 2018, the environmental protection tax replaced the pollution emission fee system that has been in effect for over 40 years. This tax is meant to be an economic tool that regulates corporate environmental pollution by targeting companies that directly emit a taxable pollutant. Taxable pollutants include air and water, solid waste and noise pollution. Companies that emit taxable pollutants in centralized and official wastewater and household waste treatment facilities are exempt from the tax on indirect emissions.

On June 27, 2017, the Permanent Committee of the NPC decided to amend the Chinese Code of Civil Procedure and the Administrative Procedure Law, formally authorizing Chinese public prosecutors (typically criminal public prosecutors) to file lawsuits in the public interest against acts that compromise the public's rights and interests in matters related to environmental protection and natural resources.

E) AUSTRALIAN REGULATIONS

Environmental matters in Australia traditionally fall within the jurisdiction of state governments rather than the federal government, which has no special jurisdiction to legislate in that domain. However, during the 1970s, there was an observable trend toward granting the federal government greater power in environmental matters.

At the different States level, environmental assessment is integrated into the decision-making process in the form of planning schemes and licenses. Environmental protection requires that activities that could have a negative impact on the environment be licensed before they are carried out. In addition, it is mandatory that works carried out by entities holding such licenses comply with the terms thereof. Industrial activities, such as chemical production, waste treatment, mining operations and intensive agriculture are affected by these rules. States may also implement legislative measures autonomously with regard to the protection of endangered species, preservation of indigenous flora, creation of national parks and water treatment and use.

Through the Environment Protection and Biodiversity Conservation Act 1999, activities that could have a considerable environmental impact at national level usually must be approved by a federal minister as well as each federal state concerned. However, the Abbott and Turnbull governments concluded bilateral agreements between the federal and state governments in order to accredit certain approval processes by the States and to ensure that these actions do not require separate federal approval.

Australia has taken various measures to address the energy question with a view to reducing greenhouse gas emissions at both the federal and state levels.

The 2007 National Greenhouse and Energy Reporting Act (NGER Act) established a national framework for businesses to disclose their greenhouse gas emissions, energy consumption and energy production.

The Abbott and Turnbull governments maintained the Kyoto objectives set by the preceding Labor government, which required a 5% reduction in carbon emissions (compared to 2000 levels) for Australia by 2020. Australia ratified the Paris Agreement shortly after it took effect in November 2016. Australia's contribution, which was submitted upstream of COP21, requires an emissions reduction level of 26% to 28% between now and 2030, in relation to 2005 levels.

The Emissions Reduction Fund is a voluntary program that allows some sectors in the economy to generate carbon credits for reducing emissions or capturing carbon. They receive one credit for each metric ton of emissions saved or captured. Credits may be purchased through reverse auctions by the Clean Energy Regulator, by means of an AUD 2.55 billion fund for the 2015 to 2020 period. To date, nearly 189 million credits have been purchased, at an average price of AUD 11.83.

The Safeguard Mechanism, which took effect on July 1, 2016, establishes a ceiling of authorized emissions for high CO_2 emissions infrastructures, with the goal that the emissions reductions purchased through the Emissions Reduction Fund not be transferred elsewhere in the country's economy. This scheme uses the framework established by the National Greenhouse and Energy Reporting Act.

In 2017, the Australian government reviewed its policy on climate change to ensure that it meets the emission reduction targets set for 2030 and complies with the commitments made by Australia under the Paris Agreement. Australia's goal now is to reduce GHG emissions 26-28% by 2030 (based on 2005 emissions).

On February 25, 2019, the Australian government published a Climate Package including AUD 3.5 billion in investments so they can meet the commitments they made under the Paris Climate Agreement. The government's existing policies made it possible for the country to meet its commitments under the Kyoto Protocol:

- a AUD 2 billion climate solutions fund to reduce greenhouse gases in all sectors of the economy *via* the Emissions Reduction Fund which let farmers, SMEs and indigenous communities have a real impact on the environment while receiving new revenue-generating opportunities;
- guaranteeing an energy future for generations to come by investing in a major technological expansion of the Snowy Mountains complex as well as a second interconnector, Marinus Link, installed between Victoria and Tasmania. Snowy 2.0 and the Battery of the Nation will supply the national electricity market with more affordable and reliable energy in terms of supply while reducing costs for Australians and companies;
- helping Australian homes and companies improve their energy efficiency to cut down on their bills;
- developing an e-mobility national strategy to make sure a transition to new mobility infrastructures and technologies is planned, coordinated and benefits all Australians;
- sustainable and clean local environments and ecosystems thanks to support provided to local communities.

9.1.3 Regulation related to the protection of computer data

The new European Regulation on the protection of personal data, the GDPR (General Data Protection Regulation), was ratified on April 27, 2016 and published on May 4, 2016 in the Official Journal of the European Union (OJEU). The GDPR is based on the right to privacy and the protection of personal data, which are fundamental to each citizen. This new legal framework will be common to all Member States and harmonized between them.

It pertains to any company which collects, manages or stores data. In response, SUEZ implemented a comprehensive action plan for cybersecurity to prepare for the application of the regulation on May 25, 2018.

The GDPR includes, in particular, the obligation to provide a clear, written explanation of the data security policy for persons whose data is stored. The companies must be capable of providing them with all of the stored data pertaining to them, in a simple format that can be provided to them *via* the internet. The GDPR also mentions the "right to be forgotten", which provides for the rapid deletion of any personal data requested.

Finally, the GDPR requires the nomination of a Data Protection Officer (DPO), who shall be responsible for questions relating to the protection of personal data and the regulatory oversight of these matters. SUEZ appointed a person to this position in order to comply with GDPR obligations.

9.2 Regulations related to business activities

9.2.1 Water

A) EUROPEAN REGULATIONS

Framework for EU policy on the water sector

Directive 2000/60/EC establishing a framework for the European Union's water sector policy, as revised in 2008, was aimed at restoring the quality of groundwater and surface water by 2015.

In addition to this outcome objective, it sets forth requirements with regard to the methods to be implemented: reducing the release of "priority" substances, which are considered to be most harmful for the environment and human health, drafting and implementing master plans and action plans, monitoring the results of the actions aimed at restoring the quality of environments and reporting on this to the European Commission.

The Directive recommends that water usage and its impact be analyzed on an economic basis, and provides for increased public participation and consultation. It sets the objective of full recovery of service costs and establishes the "polluter pays" principle.

The Directive also sets forth a strengthened legal and institutional framework for the water resource management policy, which is very similar to the French system of management through large river basins.

Three European Commission progress reports on implementing the Directive, published on March 22, 2007, April 1, 2009 and November 14, 2012 set out this approach by recommending the establishment of river basin management plans combined with the setting up of programs of measures that are now operational in almost all EU Member States. The third progress report indicated that the Directive's environmental objectives would not be achieved across Europe by 2015. Meanwhile, an action plan to safeguard Europe's water resources was published on November 14, 2012 to provide Member States with tools to help achieve these goals. The plan urged better implementation of the Water Framework Directive of 2000 but did not impose additional obligations on Member States. It also proposed the issuance, by 2015, of a new EU regulation to make the best use of water reuse techniques.

A roadmap for the "maximization of water reuse within the EU" initiative was published in September 2015, emphasizing the need to establish European standards with regard to the reuse of water for irrigation or industrial use. Reuse of water that is better supervised on a legislative level would result in important savings in water consumption, a lowering of the water stress experienced in certain European regions, an increase in the recycling capacity of nutrients contained in wastewater, and could ultimately contribute to growth and job creation in Europe. In May 2018, a draft Regulation on minimum quality standards for the reuse of wastewater for agricultural irrigation was published by the European Commission with two main objectives: leading this practice at European level to encourage its development, and raising public awareness of its economic and environmental interest. An inter-institutional agreement was reached in December 2019, paving the way for ratification by the Parliament and the Council, with a view to publication in the Official Journal of the EU before the summer of 2020.

Directive 2000/60/EC is separated into two implementation Directives (known as individual directives) which specify the "good condition" to be reached for groundwater and surface water in 2015.

Directive 2013/39/EU, published on August 12, 2013 and amending Directive 2008/105/EC relating to environmental quality standards applicable to surface water, sets concentration thresholds for 45 chemical substances or groups of chemical substances identified as a priority because of the significant risk they present to the environment and/or to human health *via* the aquatic environment. A total of 21 of these substances have been classified as hazardous; emissions of these substances into surface water must cease by 2021. The other substances are subject to national reduction targets, to be defined by the Member States. Three pharmaceutical substances were placed on a watch list.

The goals of Directive 2006/118/EC on the protection of groundwater against pollution and deterioration are primarily the proper chemical condition of water and the prevention or limitation of the introduction of pollutants into groundwater. In France, the Directive was transposed as part of the Water and Aquatic Environments Law (LEMA 2006-1772 of December 30, 2006) and the corresponding regulatory acts amending the Environmental Code.

Following its evaluation by the services of DG Environment, the revision of the Framework Directive 2000/60/EC is currently under discussion in the Council and also includes the revision of the two daughter Directives 2013/39/EU and 2006/118/EC. A decision on a possible revision of the Framework Directive is expected to come into force in the first half of 2020. The European Commission must announce its decision regarding possibly revising the framework Directive during the first quarter of 2020. There is reason to believe that this revision will be postponed to grant more time to Member States in their efforts to restore bodies of water to good status by 2027.

Directive on drinking water

Directive 98/83/EC on the quality of water intended for human consumption has raised requirements involving several parameters (turbidity, chlorites, arsenic, volatile organohalogenates, nickel), and in particular concerning lead (25 µg/l at end 2003 and 10 µg/l at end 2013), meaning that eventually no contact will be authorized between drinking water and lead pipes, which is the reason for replacing all existing lead pipes and for the work required on private and public properties to achieve this goal. It also raised requirements regarding public information on the quality of water distributed. After consulting the stakeholders concerned in 2003 and 2008, the Commission decided in 2011 not to revise this Directive, and to restrict itself to amending the details in various appendices.

After having led a public consultation in 2014 and following a "Right2Water" citizens' initiative that collected 1.8 million signatures, the European Commission published a proposal to revise Directive 98/83/EC on February 1, 2018. This revision is part of a risk-based approach and also focuses on materials in contact with water. Moreover, technical appendices II and III of the Directive have been changed by Directive 2015/1787 of the Commission to adapt them to technical and scientific progress. The monitoring of various water surfaces could now be based on a risk-based approach if the Member States so decide, in an effort to reduce superficial analyses as much as possible, using the World Health Organization model as a guideline. While these new appendices provide Member States with the option of adapting their monitoring programs to requirements and what they consider most relevant, this decision is left to their discretion. The Commission's draft project also aims to provide more transparency to the public by delivering key information on the functioning and administration of water services as well as on performance.

The European Commission, the Parliament and the Member States struck a compromise on December 18, 2019. Member States must transpose the new legislation into national law by mid-2022. The new Directive on drinking water includes new provisions and obligations regarding access to water; more rigorous limit values, especially on lead; a limit on endocrine disruptors; a consistent method for measuring microplastics; a slight improvement in transparency for consumers; and a leak prevention plan.

Directive relating to wastewater treatment activities

Directive 91/271/EEC concerning urban wastewater treatment introduced several major categories of obligations, including:

- efficiently collecting wastewater and making provisions for its secondary treatment in urban areas with over 2,000 "inhabitant equivalents";
- defining "sensitive areas" at a national level, where treatment of nitrogen and/or phosphorus is required;
- requiring a high degree of reliability of wastewater treatment systems and the obligation to monitor these systems; and
- pursuing the option of using non-collective wastewater treatment "when the organization of a collection system is not justified, whether because it is not in the best interests of the environment or because the cost would be excessive", provided that the system provides "an identical level of environmental protection".

Directive 91/676/EEC concerning the protection of water against pollution caused by nitrates from agricultural sources is intended to protect water resources, and requires the definition of "vulnerable areas" where codes of best agricultural practice must be established.

Directive 2006/07/EC concerns surface waters that could serve as bathing waters. Member States must provide for the supervision and assessment of their bathing waters. Information regarding the classification, description of bathing waters and potential water pollution must be easily accessible to the public and provided close to the area concerned.

Both Directive 2006/44/EC on the quality of fish farming waters, and Directive 2006/113/EC on the quality required for shellfish farming waters, apply to waters that require protection or quality improvement to be fit for raising fish and shellfish respectively.

The European Commission must also announce its decision to possibly revise the wastewater treatment Directive during the first half of 2020. Twenty-nine years after being enacted, there is much to suggest that the Commission wants to put forward new legislation in 2021 to take into account the consequences of climate change and the impact from the increasing presence of micropollutants in wastewater on aquatic environments and the overall environment in general.

Directive on using treated wastewater for agricultural irrigation

In May 2018, the European Commission introduced a draft Regulation to make it easier to reuse treated wastewater for agricultural purposes under its Circular Economy Action Plan. On December 18, 2019, a compromise agreement was reached between the three European institutions. The European Regulation will take effect in 2023.

This Regulation is a first legislative step towards rolling out the practice throughout Europe. It is highly likely that the European Commission will adopt legislation on other uses (urban, industrial) in the medium-term.

B) FRENCH REGULATIONS

In France, a number of laws regulate the protection of water quality and numerous public authorities are in charge of implementing them. Withdrawals and discharges that potentially have a negative impact on the quality of surface water or groundwater are subject to authorization or declaration. Public authorities must therefore authorize any installation of a pumping system for groundwater that exceeds predetermined volumes and the law forbids, or limits, the release of various substances into water. Violation of these laws is subject to civil and criminal sanctions, and the company may itself be held criminally liable.

Law 2006-1772 on water and aquatic environments, dated December 30, 2006, is intended to modernize the legal framework for water management and improve water quality in order to achieve the objectives of good ecological and chemical status set forth in Directive 2000/60/EC by 2015. It is also intended to improve public water and wastewater treatment services (access to water and transparency).

The delays observed in the application of the Directive on urban wastewater treatment (91/271/EEC) have required the government to step in where local authorities have been slow to comply. A schedule of measures and dedicated financing has been implemented within the context of the "Borloo plan to standardize the treatment of wastewater from French urban areas" to meet the goal of 100% compliance by all wastewater treatment plants before the end of 2011, as defined in the Grenelle I Law. The targets were essentially met by the end of 2011, although work continues at some sites. A July 21, 2015 decree that took effect on January 1, 2016 heightens project owners' obligations with regard to spillage from sewage systems during periods of heavy rain and compliance of collection systems with standards. Furthermore, continuous monitoring requirements on networks have been increased. Finally, a certain number of requirements concerning wastewater treatment plants were defined.

The French Government's organization of the Assises de l'eau (Special Committee) in 2018 and 2019 resulted in the announcement of a series of measures that should lead to regulatory changes, including:

- regulating the use of treated wastewater outside irrigation and watering;
- implementing measures to further protect drinking water catchment areas;
- building knowledge in water use management if water stress occurs.

Transfer of "water" and "wastewater treatment" jurisdiction

The mandatory transfer of "water" and "wastewater treatment" jurisdiction to communities of municipalities and to township committees starting from January 1, 2020 or January 1, 2026, in some cases, resulted from the adoption of the NOTRe law in 2015 and the Ferrand-Fesneau Law in 2018. This framework was modified by the Engagement and Proximity Law announced in December 2019:

- easing transfer conditions: the transfer of water and wastewater treatment jurisdiction remains obligatory as of January 1, 2020 with the possibility of the transfer being postponed until 2026 for communities of municipalities (as long as they have deliberated over the topic before December 31, 2019);
- giving public bodies for intermunicipal cooperation (EPCI) the option to then redelegate all or part of the jurisdiction to municipalities or syndicates;
- municipalities that are members of an EPCI with separate tax status can transfer to the latter some of their jurisdiction (in whole or in part) where transfer is not provided for by law or by a decision from a government body, as well as assets, equipment or public services necessary to exercise this jurisdiction.

ReUse

With the Decree of June 25, 2014 amending the Decree of August 2, 2010 on the use of treated urban residual water for irrigation of crops or green spaces, the government has established new technical requirements applicable to owners and operators of wastewater treatment plants and irrigation systems.

This decree includes new provisions:

- it authorizes sprinkling irrigation and watering systems: it terminates the experimental application file, sets specific technical requirements, and supplements the information to be provided on the irrigation program;
- it specifies the technical requirements for the design and management of the distribution network, for the storage of treated wastewater, and for maintenance of the irrigation or watering equipment;
- as part of the quality monitoring program for treated wastewater, it modifies the frequency of the periodic monitoring of the sanitary quality levels of treated wastewater;
- it includes a specific rule on sanitary quality levels of treated wastewater aimed at wastewater treatment plants with a low raw water load level;
- it specifies the procedure to follow in case of changes to key elements of the authorization file: "Any change that might cause a noticeable change in key elements of the permit and described in Appendix IV must be disclosed to the prefectural authority by the permit holder before its implementation".

Biomethane tariffs

Several decrees of June 24, 2014 authorized and set the feed-in tariffs for biomethane derived from sludge and wastewater:

- the first decree amends the type of inputs in the production of biomethane to include "materials, such as sludge, grease, or fluids, resulting from the treatment of wastewater in a digester";
- a second decree amends the minimum purchase tariff, established by the Decree of November 23, 2011, benefiting wastewater treatment plants producing biomethane with the introduction of a new "input" premium and specific tariff adjustments. The decree therefore provides for a third category of inputs: waste from wastewater treatment plants and similar, which are eligible for a "PI3" premium of between 0.1 and 3.9 euro cents per kWh gross calorific value.

These tariffs will be reviewed under the multi-annual energy program (EPE) in 2020.

C) SPANISH REGULATIONS

In Spain, private contract law governing water, dating from 1879, was entirely superseded in 1985 by public regulation provisions under which all surface water and groundwater was considered as belonging to the public domain. The private use of such water requires a concession or administrative license. The Water Law of 1985 transposed all EU requirements contained in previously adopted European Directives.

Current water law (Royal Decree 1/2001, of July 20, 2001 transposing Directive 2000/60/EC) also imposes processes for water desalination and reuse, presented as solutions for increasing the availability of water resources. As for water savings, the provisions introduce the general obligation to measure water consumption *via* standardized metering systems, or, for irrigation purposes, to administratively define a usage benchmark.

To guarantee the proper ecological status of water, operating permits impose strict limits on authorized ecological flows and discharges.

Other significant water laws supplementing Royal Decree 1/2001 are: Royal Decree 849/1986 of April 11, 1986 approving the Public Water Act, which was amended by Royal Decree 9/2008 of January 11, 2008, to conform to Directive 2000/60/EC and to incorporate some of the requirements of Directive 2007/60/EC. In addition, Royal Decree 140/2003 of February 7, 2003 on health criteria for the quality of water intended for human consumption transposed Directive 98/83/EC. Finally, Directive 91/271/EEC was transposed through Royal Decree 11/1995 of December 28, 1995, on the rules of wastewater treatment in urban areas and by Royal Decree 509/1996 of March 15, 1996.

Meanwhile, EU Directives 91/676 and 2006/07 were transposed, respectively, by Royal Decree 261/1996 of February 16, 1996 and Royal Decree 1341/2007 of October 11, 2007.

D) UNITED STATES REGULATIONS

In the United States, the primary federal laws regarding water distribution and wastewater treatment services are the Clean Water Act of 1972, the Safe Drinking Water Act of 1974 and regulations issued to implement these laws by the Environmental Protection Agency (EPA). Each state has the right to impose higher standards and stricter criteria than those established by the EPA, and several states have done so.

The main regulatory changes of the past few years are as follows:

In the drinking water sector, in 2002 the EPA adopted the Interim Enhanced Surface Water Treatment Rule for systems with more than 10,000 inhabitant equivalents and the Long-Term 1 Enhanced Water Treatment Rule for systems with less than 10,000 inhabitant equivalents. The purpose of these regulations was to improve turbidity controls in surface water in treatment plants and thus to reinforce checks of cryptosporidium content in this water.

In 2006, the latter rule was updated in the form of the Long-Term 2 Enhanced Surface Water Treatment Rule to strengthen protective measures on contaminants that are required for high-risk public water systems. The EPA also strengthened the regulations on disinfection byproducts (Stage 2 Disinfectants and Disinfection Byproducts Rule). Finally, the Ground Water Rule establishes multiple restrictions designed to prevent drinking water from being contaminated by bacteria or viruses. The proposed revisions to the standards relating to coliform bacteria (Total Coliform Rule) should prompt those systems that are vulnerable to microbiological contamination to adopt more effective operating practices.

Since 2010, the EPA has developed a new strategy to protect public health against contaminants which promotes a "grouping" approach to contaminants, stimulates technological innovation and strengthens the implementation of existing legislation, such as the Toxic Substances Control Act (TSCA). In wastewater treatment, many facilities are now required to add a third treatment stage to remove phosphorus and eliminate nutrients in order to preserve fragile environments. Many of these facilities are also now required to control their toxic emissions and comply with quality standards aimed at restoring favorable conditions for bathing and fishing in the receiving environment. As part of the national emissions licensing system, the EPA uses a method that analyzes total effluent toxicity. Under the provisions of the Clean Water Act, municipalities also have to invest in the renovation of their wastewater Treatment Infrastructures as well as in the reduction of flows at source, in order to improve control of discharges, particularly of rainwater and wastewater from sewers, into the natural environment.

A new law, the Clean Water Rule, aiming to extend federal protection of river networks and water supply systems by specifying zones falling under the Clean Water Act took effect on June 28, 2015 despite the firm opposition of many players in the US economy.

E) CHINESE REGULATIONS

The decree signed in 2014 by the Chinese Premier on wastewater treatment networks and facilities now mandates cities to plan their wastewater treatment systems according to the climate and local geography, as well as their economic and social development. For example, under the new regulations, storm water drainage systems and sewers will be separated in new construction areas. Companies in the food processing, pharmaceutical and construction industries must now apply for wastewater discharge permits.

On April 16, 2015, the State Council issued a "Plan of Actions for the Prevention and Control of Water Pollution" known as the "Ten-Point Water Plan" (which is actually 26 detailed requirements and 238 measures). The plan aims to control pollution discharges, to promote economic and industrial transformation, to save and recycle resources, to promote the progress of science and technology, to use market mechanisms and to enforce the law and regulations, to strengthen management and ensure the safety of the aquatic environment, to clarify responsibilities, and to encourage public participation. It sets targets for 2020, putting in place stricter controls on polluting companies with emission limits and providing for stricter supervision by the authorities and the public. In addition, the plan also covers the control of pollution, sustainable water use in agriculture, the use of municipal water, coastal water management and overall protection of the ecological environment. The plan aims to gradually improve the groundwater and surface water situation (Blue River, Yellow River and the Song Hua, Huai Hai and Liao Rivers) by 2020. One of the main actions is to clean heavily polluted water (called "dark and smelly" in big cities).

F) AUSTRALIAN REGULATIONS

In Australia, the laws of the States and Territories grant the right to control the allocation and use of water to the Crown, thus abolishing the prior Common Law rules. The extraction and use of water and the construction of infrastructure (dams, irrigation systems) usually require approval.

In 2004, the Council of Australian Governments adopted the National Water Initiative, which set the guidelines for a comprehensive reform of the national water management system in all areas: accounting for water resources, water storage capacities and awareness, water access rights and planning framework, water markets and marketing, water pricing, integrated management, reform of urban water management, community partnerships and adjustments. This reform has had the effect of splitting the rights to water from the land and allowing water to be exchanged as a valuable asset, either temporarily or permanently.

The current reforms have also led to more bids for construction and operation from private operators in terms of water infrastructure, such as wastewater treatment plants. For example, in New South Wales, the Water Industry Competition Act 2006 requires the construction and operation of such infrastructures and their links with the relevant water networks to be subject to licenses whose terms must be strictly adhered to by operators.

9.2.2 Waste

In many countries, recovery and waste treatment sites are subject to laws that require industrial companies to obtain authorizations from public authorities to be able to operate their sites. Obtaining these authorizations requires, in particular, specific environmental and health impact studies to be submitted together with a risk assessment for the facility concerned. For instance, operators of landfills must provide specific financial guarantees (often in the form of bank guarantees) that cover the restoration of the site and monitoring after the closing of the site (for a 30-year period in most countries). Operators must also observe specific standards with respect to discharges and emissions arising from processes; incineration plants, for example, are subject to regulations intended to limit emissions of pollutants and to encourage energy recovery. Waste flows are also subject to specific regulations, depending on their type.

A) EUROPEAN REGULATIONS

Circular Economy Package

Following the work of the Commission in 2014 and the withdrawal of the Circular Economy Package proposed on July 2, 2014, the new Commission announced the publication of a new and more ambitious package incorporating a more efficient management of natural resources, in addition to better waste management. The Circular Economy Package published on December 2, 2015 aims to achieve better management of resources at European level through binding recycling targets for different material flows and establishes the general framework of operation for the waste sector through 2030. It requires the revision of six Directives on waste (called the Waste Package): the Waste Framework Directive (2008/98/EC), the Packaging and Packaging Waste Directive (94/62/EC), the Landfill of Waste Directive (1999/31/EC), the End-of-Life Vehicles Directive (2000/53/EC), the Waste Batteries and Accumulators Directive (2006/66/EC) and the Waste electrical and electronic equipment Directive (2012/19/EU). The Waste Package was adopted in May and published in June 2018 in the OJEU. The time frame to transpose it into national law is set for July 2020.

► Waste Framework Directive

The first Waste Framework Directive (2008/98/EC) was published in the OJEU on November 22, 2008. This directive simplifies existing legislation by repealing the former directive on waste, the directive on hazardous waste and part of the directive on the disposal of used oils.

By establishing a new framework for waste management services in Europe, European authorities wish to encourage national waste prevention programs and to promote recycling and recovery.

The Directive thus reinforces the principle of hierarchy in waste treatment methods, encouraging Member States to employ, in order of priority, prevention, reuse, recycling, energy recovery and finally, as a last resort, landfill. An analysis based on the "life-cycle" approach will, however, allow certain adjustments to be made within this hierarchy. At the same time, Member States have been setting recycling targets: 50% of municipal waste and 70% of non-hazardous construction and demolition waste by 2020.

The Directive clarifies the definitions of recycling and recovery and recognizes incineration with energy recovery, if certain efficiency criteria are met, as a recovery operation. It also introduces two new concepts: that of the byproduct and that of "end of waste status". Once the directives have been adopted, criteria for end of waste status will be clarified through the comitology process. This same process was also used in 2011 to define a method for measuring waste recovery efficiency against targets.

Under the Circular Economy Package, a revision of the Directive was formally adopted in May 2018 (the Directive was published in the OJEU on May 30, 2018).

The new Directive revises recycling ambitions upwards. After having defined municipal waste, it aims for 55% recycling or reuse of this waste by 2025, 60% by 2030 and 65% by 2035. Regarding food waste, the Directive provides for putting in place a methodology by the end of 2019 as well as indicative targets to reduce this waste by 30% by 2025 and by 50% by 2030.

It defines a calculation method with two measurement points as well as the adoption of a delegated act on the average loss rates of sorting centers.

► Landfill of Waste Directive

Directive 1999/31/EC on landfilling waste sets the technical and operational requirements applicable to both landfills and the waste deposited. It aims to prevent or reduce the environmental impact of the landfilling of waste, in particular on surface water, groundwater, soil, air and human health. It defines the various categories of waste (municipal, hazardous, non-hazardous and inert) and distinguishes between three types of facilities: landfills for hazardous waste (known in France as *installation de stockage de déchets dangereux* – ISDD), landfills for non-hazardous waste (known in France as *installation de stockage de déchets non dangereux* – ISDND), and landfills for inert waste (known in France as *installation de stockage de déchets inertes* – ISDI).

A revised version of the Directive (Directive 2018/850) was adopted on May 30, 2018 as part of the Circular Economy Package. It sets new goals, and in particular a goal to reduce municipal landfilled waste by 10% by 2035 (and by 2040 for countries that landfilled more than 60% of their waste in 2013) was also adopted.

► Directives relating to specific waste

Directive 94/62/EC aims to reduce the environmental impact of packaging and packaging waste. This Directive established quantified targets for the recycling and recovery of packaging used in the European market.

The Directive was revised in 2004 to clarify the definition of the term "packaging," then again in 2005 to allow new Member States extra time for implementation.

The Directive was also revised under the Circular Economy Package in 2018. As a result, the key objectives were revised:

- 65% of packaging waste recycled in 2025 and 70% in 2030;
- the following objectives must be met for materials contained in packaging waste: by 2030, 55% for plastic, 30% for wood, 80% for ferrous metals, 60% for aluminum, 75% for glass and 85% for paper and cardboard.

Directive 2002/96/EC on Waste electrical and electronic equipment (WEEE) imposes measures concerning product design, the establishment of collection, treatment and especially recovery systems, and manufacturers' participation in these measures in such a way as to encourage them to integrate recycling measures into the design stage. The Directive introduces the principle of Extended Producer Responsibility, making it mandatory for them to fund collection from the drop-off sites and treatment, recovery and disposal of WEEE (for both households and businesses). These obligations are accompanied by quantified targets for selective collection, recovery and reuse. This Directive was revised in 2018 under the Circular Economy Package.

Directive 2012/19/EU entered into force on August 13, 2012, amending the previous Directive. Accordingly, the objectives regarding collection rates were increased: in 2016, the rate was to amount to 45% of average electrical and electronic equipment from household and professional sources marketed during the three preceding years, and attain 65% by 2019. In addition, recycling and recovery targets, currently set by equipment category at between 50% and 75% for reuse and recycling and between 70% and 80% for recovery, should be raised by 5% by 2018. Finally, the scope has been expanded to include, in principle, all electrical and electronic equipment (with the exception of a few equipment categories that are specifically excluded).

Similarly, Directive 2011/65/EU on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment was published in the OJEU on July 1, 2011. The Directive was amended in 2015 to add four substances.

Directive 2006/66/EC lays down the rules for the collection, recycling, treatment and disposal of batteries and accumulators. It prohibits the sale of certain batteries containing mercury or cadmium in a proportion greater than a preset threshold, and sets two collection targets (25% minimum by September 26, 2012 and 45% minimum by September 26, 2016). This Directive was amended by Directive 2008/12/EC, which came into force on March 30, 2008, and which specifically introduced changes in the implementing powers of the European Commission. This Directive was revised in May 2018, still under the Circular Economy Package.

Directive 2000/53/EC on End-of-Life Vehicles (ELVs) requires owners of ELVs to return them to an authorized operator for destruction, on penalty of being unable to de-register their vehicle. Destruction involves extracting all materials and optimizing their reuse, recycling, or recovering what can be recovered. The recycling rate must reach 80% and the recovery rate 85% as from 2006, and 85% and 95% respectively by 2015. This Directive was revised in May 2018.

Directive 86/278/EEC on the protection of the environment, and in particular of the soil, regulates the use of wastewater sludge in agriculture, so as to avoid harmful effects on soil, plants, animals and humans. Thus, in order for sludge from wastewater treatment plants to be recovered for agricultural purposes, it must comply with traceability requirements regarding organic components and the various metallic trace elements that it may contain (heavy metals such as cadmium, mercury and lead). French standard NFU 44-095, drafted in 2002, goes further, defining a strict framework for recovery of substances after treatment of wastewater or from the organic portion of household waste after composting.

In March 2016, the Commission proposed revising the regulations on fertilizers. The primary objective is to ensure cycling of nutrients. European institutions reached a tentative agreement in December 2018.

Regulations relating to cross-border waste shipment

Regulation 1013/2006/EC governs cross-border shipments of waste, the objective being to provide ecologically sound management. The regulation establishes a system based on two procedures:

- ► information procedure: a simple procedure consisting of including an informational document with shipments of waste. All non-hazardous waste intended for recovery within the European Union must be transferred by means of this procedure;
- ► notification and prior consent procedure: a cumbersome procedure that requires prior consent from the relevant authorities and the establishment of financial guarantees. All hazardous waste intended for recovery within the European Union must be transferred by means of this procedure.

Regarding waste to be eliminated:

- ► within the EU, these cross-border shipments are subject to a prior notification and consent procedure;
- ► such shipments to non-EU members states are in principle prohibited.

This Regulation also incorporates Basel Convention provisions on the control of cross-border hazardous waste movements and disposal.

The Regulation provides for more rigorous performance measures. It requires Member States to carry out inspections and spot checks. It also authorizes physical controls of transferred waste, in particular the opening of containers, and requires Member States to notify the European Commission of their domestic legislation on illegal transfers and corresponding sanctions. A revision of the regulation was published in the form of Regulation 660/2014 in the OJEU on June 27, 2014 to mitigate the divergences and gaps identified in applying the regulation and inspections in Member States. This involves establishing inspection plans that are regularly and consistently planned to eliminate illicit waste shipments.

The European Commission issued in 2016 a report on the effective functioning of the waste market in the Union. The report outlines areas for operational improvement in cross-border transfers of waste in the perspective of modifying its legal framework in 2020. The Commission therefore recommends the development of a "Schengen waste area" and the strengthening of the prior consent system for recovery facilities, which allow a faster procedure for the transport of waste.

In 2017, the European Commission published a roadmap on the regulations related to waste shipments. An assessment will be conducted which aims to evaluate if Regulation (EC) 1013/2006 relating to waste shipments (WSR) meets its objectives and is in line with EU domestic market environmental policy. The assessment was completed in 2019. The European Commission has proposed a revision of the Regulation as part of its new Action Plan on the Circular Economy published on March 11, 2020. A legislative proposal is expected by the end of 2020.

Directive on industrial emissions

Directive 2010/75/EU on industrial emissions, published in the OJEU on December 17, 2010 (the deadline for its transposition was January 7, 2013), incorporates Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) along with six sector-based Directives, including the Directive on incineration (2000/76/EC) and the Directive on limiting emissions of certain pollutants into the air from large combustion plants (2001/80/EC). Following a two-year deadline for transposition, the Directive was supposed to come into effect in early 2014, or early 2016 for existing facilities.

Up to now, as a complement to the environmental thresholds put in place by the directive on the incineration and co-incineration of waste, Directive 96/61/EC called the "IPPC" Directive, which provides that certain industrial and agricultural activities, one of which is waste services management, must be subject to a prior authorization, requiring certain environmental conditions to be met. Companies are responsible for preventing and reducing pollution that they might cause, through the adoption of specific measures (for example: recycling, accident prevention and treatment of sites at end-of-life), and through meeting operating requirements (for example, limits to the emission of polluting substances and monitoring of discharges). The new directive introduces more stringent BREFs (best available techniques reference documents), modifies emissions limit values and broadens the scope of application to new types of facilities, including recycling facilities.

A proposal to revise the BREF on waste incineration was released on May 24, 2017. The document and the best available techniques (BAT) were adopted during the second half of 2019.

The BREF on waste treatment has been under revision since 2013. It applies to all treatment facilities for non-hazardous waste excluding incineration. Its scope of application covers the functioning of incineration plants (including emissions to air and water from such plants). The Commission's implementing decision 2018/1147 of August 10, 2018 setting forth the conclusions regarding the best available techniques for treating waste under Directive 2010/75/EU from the European Parliament and Council was published in the OJEU on August 17, 2018. The facilities covered by these BAT have four years from the publication date to implement the BAT.

The Directive on industrial emissions is being assessed (effectiveness, consistency, efficiency and how much value European action adds) and it should be finished during the first half of 2020. The European Commission will then decide if it is necessary to revise this Directive or not. Climate ambitions and zero pollution (air, ground, water) in the Green Deal suggest that this Directive will be revised to help contribute to the objectives set.

Plastics strategy

Following the Union's Strategy on plastic materials, in May 2018, the Commission proposed a Directive on reducing the environmental impact of certain plastic products. This Directive targets the products that are the most prevalent in the seas and on the beaches of Europe. An interinstitutional agreement was reached in December 2018 and contains positive items that strongly impact the Group's R&R activity in Europe. In fact, the legislation of this future Directive provides for:

- a binding collection target of 90% of plastic bottles in 2029, with an intermediary step of 77% in 2025;
- 25% of mandatory recycled content for bottles made with PET in 2025;
- 30% of mandatory recycled content for all plastic bottles in 2030.

This Directive took effect in June 2019. The general framework must be transposed by Member States by June 2021. Some provisions will not take effect until 2023 or even later.

The European Commission is currently working on a position statement on biodegradable and biosourced plastics as well as chemical recycling. These positions should be published in 2020.

B) FRENCH REGULATIONS

In France, ministry and prefecture decrees and orders define the rules governing the treatment of waste, in accordance with Articles L. 511-1 *et seq.* of the ICPE (Environmental Code regarding facilities classified for the protection of the environment). They specifically regulate the design, building, operation and monitoring after closure of these facilities. A distinction is drawn between inert, non-hazardous and hazardous waste. Hazardous waste is subject to strict tracking obligations throughout the entire treatment chain. Traceability of hazardous waste is provided by a waste tracking form (BSD).

Furthermore, operators of companies producing or shipping waste, collection operators, transporters, traders and operators of centers for the transport, transfer or treatment of waste must keep an updated chronological register of the production, shipment, reception or treatment of said waste (R. 541–43 of the Environmental Code).

Future law on stopping food waste and on the circular economy

Presented to the Council of Ministers in July 2019, the draft bill on stopping food waste and on the circular economy was adopted on first reading in the French Senate on September 27, 2019, then in the French National Assembly on December 20, 2019. It was definitively adopted in January 2020.

This legislation follows on from the Circular Economy Roadmap published in April 2018 and the revision of European directives relating to waste this same year.

It provides for a certain number of measures to move consumption trends and production more toward circularity. This means reducing the amount of waste produced by supporting eco-design, prohibiting single-use plastics by 2040, or promoting bulk sales and repairing products that break. Recycling is also a core concept of this dynamic, with measures supporting incorporating recycled materials in products. Funding for these sectors will largely come from new Extended Producer Responsibility (EPR) streams, particularly for construction, industrial and commercial packaging, or even toys and sporting goods. Below are the legislation's key measures:

- better inform consumers (especially about product recyclability and recycling rates);
- reduce waste (-15% household waste by 2030 compared to 2010 and -5% waste from economic activities);
- goal of leaning towards 100% recycled plastic by January 1, 2025 and ending single use plastic by 2040;
- improve source separation and selective collection, especially for biowaste by 2023;
- possibly put instructions on beverage packaging in 2023 if collection goals are not met;
- require that recycled materials be incorporated into products;
- ensure that at least 70% of energy is recovered from waste that cannot be used as a material by 2025;
- reduce the landfilling of non-hazardous waste (increase the objective from the 2015 energy transition for Green Growth law and in line with European regulations);
- create new Extended Producer Responsibility (EPR) streams, especially for construction waste;
- create harmonized sorting labels for household packaging;
- sustainably manage water resources by reusing treated wastewater.

Initial implementing decrees for this legislation are expected in summer of 2020.

The Circular Economy Roadmap

On April 23, 2018, the Prime Minister, Edouard Philippe, presented the Circular Economy Roadmap which highlights the necessity to stop planned obsolescence, better sort our waste to recycle more and make every consumer an active participant in the circular economy. A dialog began on October 24, 2018 which resulted in the creation of 50 measures to achieve a fully circular economy. Out of the 50 measures announced, 37 directly target companies.

The five objectives of the Circular Economy Roadmap are as follows:

- reduce by 50% waste to be landfilled;
- 100% of plastics recycled;
- -30% of resource consumption;
- save 8 million additional metric tons of CO_2 every year through plastic recycling;
- create 300,000 additional jobs.

Beyond several measures relating to the EPR sector, one of the Circular Economy Roadmap's main measures is providing incentives to incorporate recycled plastic into products. Measures also concern the introduction of guidelines or the recovery of construction waste (overhauling waste diagnosis, in particular).

Energy Transition for Green Growth Law

Law 2015-992 of August 17, 2015 sets new objectives for rolling out the circular economy. Title IV of the Law to "control waste and promote the circular economy" contains measures that are aimed at:

- determining a national transition strategy toward the circular economy that includes a "plan for scheduling the necessary resources for the primary sectors of economic activity that identify potential for preventing the use of primary and secondary raw materials";
- improving waste recovery by prohibiting discrimination against materials originating from recovered waste and by promoting the production of energy stemming from waste recovery where it is not recyclable;
- setting specific targets for waste prevention and waste management for 2020 and 2025:
  - reducing waste at source by a 30% reduction in the quantities of non-hazardous, non-inert waste admitted to landfills in 2020 compared with 2010, and by 50% in 2025,
  - banning single-use plastic bags beginning on July 1, 2016, in accordance with the decree of March 30, 2016,
  - banning the use of disposable plastic cups and plates beginning on January 1, 2020, except for those that can be composted domestically and that are made up entirely or partially of bio-based materials,
  - more precisely defining the "proximity principle" in the prevention and the management of waste, provided by the Framework Directive on Waste (Framework Directive 2008/98/EC),
  - increasing the amount of waste to be recovered in material form, notably organic waste, by steering 55% by 2020, then 65% by 2025, of non-hazardous, non-inert waste, measured by mass toward these recovery methods. The public service

managing these waste flows breaks down these objectives locally to reduce quantities of residual household waste after recovery. To this end, it progresses toward sorting of organic waste at source, arriving at a point where by 2025 all waste producers are using this method,
- reaching 153 zero waste and zero wastage regions to support exemplary local communities in their waste reduction and recycling processes,
- reducing the production of household and similar waste by 10% by 2020,
- achieving a rate of 65% of waste recycled in 2025,
- putting half as much waste in landfills in 2025 compared to 2010,
- creating 10,000 lasting jobs in operating new waste processing installations and avoiding releasing 3.4 million metric tons of CO_2 equivalent annually between now and 2025,
- progressively implementing incentive-based pricing, where each person pays to eliminate their waste based on quantities produced, as introduced in the amending finance law dated December 29, 2015,
- experimenting with sorting recommendations for all plastic waste and extending these sorting instructions nationwide by 2022,
- streamlining the flow of resources used and produced on a relevant regional scale under cooperation, pooling and substitution actions for these flows, thus limiting environmental impacts and improving economic competitiveness and the attractiveness of regions.

NOTRe Law

Law 2015-991 of August 7, 2015 concerning the new territorial organization of the French Republic modifies the level of jurisdiction with relation to the drafting of waste management plans. Waste management plans will from now on be drawn up at the regional level, not at the departmental level. Regional prevention and waste management plans must be approved within a period of eighteen months following the enactment of the law. The NOTRe Law also strengthens the inter-community aspects and changes rules relating to regional planning by introducing a regional planning and sustainable development scheme for territories, the STRADETT, a merger of several existing schemes. Since March 1, 2017, public decisions made regarding waste, environmental authorizations or facilities classified for the protection of the environment must be compatible with waste prevention and management plans.

Cross-Border Shipments of Waste (CBSW)

For CBSW leaving France, the French Environmental Code requires that the organizers or entity providing notice of shipments be headquartered in France (L. 541–40 of the French Environmental Code).

As from publication of Decree 2015-1396 of November 3, 2015, the authority with CBSW jurisdiction is no longer a French administrative department center (DREAL), but rather a national one (PNTTD). Consequently, all CBSW notification documents must be forwarded to that center.

Decree 2016-288 of March 10, 2016, relating to various provisions for adaptation and simplification in the area of waste prevention and management, modifies regulatory provisions of the circular economy and those relating to the prevention and management of waste. It modifies the rules applicable to the collection of household waste by the public waste management service. It inserts new measures for sorting and separate collection by producers or entities holding paper, metal, plastic, glass or wood waste. It adapts the provisions of the Environmental Code relating to the management of Waste electrical and electronic equipment (WEEE).

It determines the manner of applying Article L. 541–10–9 of the Environmental Code concerning distributors of construction materials, products and equipment for professionals to organize systems for taking back waste from materials, products and equipment of the same types that they sell.

It also provides several simplifications to waste prevention and management measures so as to accelerate the transition to the circular economy.

The notice to operators of waste processing facilities and operators of production facilities that use waste in place of raw materials dated January 13, 2016 states the legal status of what is produced by an installation for which the inputs have partial or full status as waste. Waste is defined in Article L. 541–1–1 of the Environmental Code as "any substance or object which a holder discards or intends or is required to discard."

C) CHINESE REGULATIONS

The 13^{th} five-year plan for 2016-2020 continues to promote the adoption and stricter application of waste removal and treatment policies in the interest of environmental protection.

In early 2015, the Chinese Ministry of the Environment published temporary guidelines for screening risks concerning soil contamination in country planning. This document supplements the standard techniques for managing contaminated sites, including technical recommendations for soil remediation that were published by the Ministry of the Environment in 2014. These recommendations are consistent with the decontamination requirements of similar programs in countries with more developed environmental regulations.

In September 2014, the National Development and Reform Commission (NDRC), the Ministry of Finance, and the Ministry of Environmental Protection jointly issued rules on the nationwide implementation of differentiated tariff policies targeting pollutants discharged by industrial companies. The measure will raise the taxes collected for pollutant discharges by national and local authorities in order to reallocate these sums to fund environmental protection measures and policies.

On July 27, 2017, the Chinese Council of State published a plan to ban foreign waste from entering the country as well as reform the solid waste import administrative system (Plan). The Plan announced that at the end of 2017, solid waste presenting a serious threat to the environment and generating wide-ranging public concern will not be allowed to enter the country. Import licenses for solid waste will be canceled. The ban includes eight types of plastic, paper, textile waste and vanadium slag.

D) AUSTRALIAN REGULATIONS

Each Australian state and territory has a different approach to waste legislation. Some, like New South Wales and Victoria, have comprehensive schemes for classifying waste. Others, such as Tasmania, pay particular attention to the most dangerous types of waste. Some states legislate at all levels, from waste generation to elimination, while others only regulate the elimination of waste.

In general, licenses are required for waste treatment, recovery and elimination. The terms of a given license generally stipulate the type of waste that a center may receive. Violations often occur when waste is eliminated in a plant other than the one for which the permit was obtained and that is authorized for a given operation. Transporters of certain types of waste must also hold permits that may be obtained in accordance with the various environmental regulations of the different states and territories.

Some waste must be tracked as it crosses Australia. Each state has different legislation with regard to the type of waste that must be monitored. Authorizations to transport waste from one state or territory to another must be obtained prior to shipment from the jurisdiction where the shipment is being sent.

The Hazardous Waste Regulation of Exports and Imports Act of 1989 requires obtaining a permit for hazardous waste to be imported to or exported out of Australia. Some of this waste must then be tracked during movement in Australia.

The fragmentation of the Australian market results in different frameworks for markets between the states and the territories and incurs added costs, more complex exchanges of information and in some case even adverse effects.

The National Waste Policy approved in 2009 sets regulations in the area of waste management and resource recovery by 2020 in six key areas and identifies 16 strategic priority actions that will feature a national and cohesive approach. These strategies will take the form of actions on the national level that will be carried out in close collaboration and under the authority of one or more jurisdictions.

10 Information on trends

The major trends that have affected the Group's activities since the close of the latest fiscal year are described in chapters 5 and 7 of this Universal Registration Document.

11 Profit forecasts or estimates

As part of the new Shaping SUEZ 2030 strategic plan announced to the public on October 2, 2019, SUEZ has announced that, for the next four years until 2023, the Group's ambition is to embed its new culture in the Group, pave the way for steady organic growth with lower capital intensity, transform its business portfolio and improve its return on capital employed by at least two points, enhancing its ability to increase its dividend payout ratio.

As announced during the investors meeting on October 2, 2019, the Group will use new performance indicators from 2020 onward: recurring EPS (earnings per share) and recurring free cash flow. These indicators do not include items that arise over a limited period of time, to reflect income and cash flow attributable to shareholders over the long term.

The results of these changes would incidentally be visible from 2021, and the financial targets the Group set for this date [1] reflect how attentive the Group is to profitability and long-term performance.

- recurring earnings per share (EPS) of EUR 0.8 [2] (new definition);
- recurring free cash flow (FCF) (new definition) of EUR 500 million [3].

As part of a financial leverage net debt/EBITDA of 2.8 to 3 times.

SUEZ announced the following forecasts for 2020 [1] when it published its results for fiscal year 2019:

- organic revenue growth of 2% to 3%;
- organic EBIT growth of +5% to 6%, excluding the impact of Covid-19 in China, which is estimated at between EUR 30 million to EUR 40 million over a three-month period, assuming the situation will gradually return to normal during the second quarter of 2020;
- recurring earnings per share (EPS) of EUR 0.65 [2] (new definition);
- recurring free cash flow (FCF) (new definition) of EUR 300 million [3].

The Covid-19 epidemic has spread since these forecasts were announced. On March 11, 2020, the World Health Organization labeled Covid-19 a pandemic. It is now affecting other regions in the world, while it only affected China initially.

As a result, as of the date of this Universal Registration Document, the impacts on the Group's business activities are as follows:

- in China, impacts of Covid-19 epidemic announced on February 26 related to the hazardous waste incineration business activities as well as to water volumes in Macau. Considering the Group is continuing to record a gradual return to business activities, SUEZ confirms that the impacts specified on February 26 are still valid: EUR 30 to 40 million on EBIT for 2020, mainly over the first quarter, with a gradual return to normal planned for the second quarter, for now;
- in Europe and the Americas, even though governments started acting very recently, the Group is starting to see initial impacts on things like raw material prices and volumes. These impacts are not uniform. Business activity is still normal in some pockets around the world, in some industrial sectors and for certain customers;

(1) Assuming no major changes in economic or market conditions (including interest rates, foreign exchange rates and raw material prices) compared to conditions observed over the past 12 months.
(2) (Net income Group share – (hybrid coupon + total one-off cash and non-cash expenses + capital gains or losses on disposals) x (1 – applicable tax rate))/number of shares.
(3) Cash flows from operating activities – hybrid coupon + restructuring costs (cash) – tangible and intangible investments – leases – net financial expenses – cash flow including dividends to/from non-controlling interests.

- so although it is too early to quantify the impact this will have on 2020 targets, which are currently suspended, and to create new targets, it is clear that like all industries, SUEZ is likely to be significantly impacted in 2020 due to the consequences of quarantine measures around the world. SUEZ is monitoring the situation closely and will inform the market in good time as the situation unfolds.

Against this backdrop, SUEZ has already started adapting to this environment. The Group's transformation plan – Shaping SUEZ 2030 – is delivering a major improvement in performance and profitability as well as more selective investments, and it is already well underway throughout the entire Group.

With regard to the public health crisis, in 2020, SUEZ had already adopted additional measures to optimize business activities and mitigate potential impacts on earnings and profitability as well as increase the Group's liquidity while providing the best service to its customers:

- take strong short-term measures to significantly reduce expenses and costs beyond what was initially forecast;
- reduce investments in 2020 by around 15% compared to 2019 levels while being mindful that investments are needed in certain business activities to guarantee service levels.

12 Governance, management and supervisory bodies, and General Management

12.1 Composition of governance and management bodies

12.1.1 Composition of the Board of Directors

Since the beginning of 2019, the following changes have taken place in the composition of the Board of Directors:

- the appointments of Bertrand Camus and Martha Crawford as Directors during the Shareholders' Meeting on May 14, 2019;
- the non-renewal of Lorenz d'Este's and Valérie Bernis' terms of office, which expired at the end of the Shareholders' Meeting on May 14, 2019;
- the renewal of Isabelle Kocher's, Anne Lauvergeon's, and Nicolas Bazire's terms of office as Directors for four years.

The Board of Directors, starting from May 14, 2019, appointed Jean-Louis Chaussade as Chairman of the Board of Directors and Bertrand Camus as Chief Executive Officer, following his appointment as Director at the Shareholders' Meeting on May 14, 2019.

The Board of Directors therefore has 19 members as of the date of this document. In addition, a representative of the Works Council of SUEZ's Economic and Social Unit attends the meetings of the Board of Directors.

Detailed information on the composition of the Board of Directors can be found in section 14.4.1 of the Report on Corporate Governance of this Universal Registration Document.

The information below shows the composition of the Board of Directors as of December 31, 2019, which has 19 members, as well as individual information about each of the Directors (including the offices and positions held by the Directors during the last five years).

Jean-Louis Chaussade

68 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Chairman of the Board of Directors of SUEZ

Offices and positions held at the Company:
Chairman of the Board of Directors and member of the Strategy Committee

Number of SUEZ shares held:
80,891 shares
19,828.34 units of the Company mutual fund, SUEZ Actionnariat France, acquired under the SUEZ Group Employee Shareholding Plans

BIOGRAPHY

Jean-Louis Chaussade, born on December 2, 1951, has an engineering degree from ESTP (1976) and holds a Master's degree in Economics (Sorbonne, 1976). He is also a graduate of the Institut d'études politiques de Paris (1980) and the Harvard Business School's Advanced Management Program (1988). He first joined Degrémont in 1978, and was subsequently appointed Chief Operating Officer of Degrémont Espagne, headquartered in Bilbao, in 1989. During that period, he was also appointed Director of Aguas de Barcelona. Jean-Louis Chaussade became Chief Executive Officer of Dumez Copisa (Spain) in 1992. In 1997, he was appointed Chief Operating Officer of Lyonnaise des Eaux in South America, and Chief Operating Officer of SUEZ (now ENGIE) for South America. He was appointed Chairman and Chief Executive Officer of Degrémont in 2000 and, in 2004, Deputy CEO of SUEZ (now ENGIE) and Chief Executive Officer of SUEZ Environnement (now SUEZ). He was Chief Executive Officer of SUEZ from July 23, 2008 to May 14, 2019 – since when he became Chairman of the Board of Directors of the Company. Jean-Louis Chaussade has been a Director of Criteria Caixa SAU since October 19, 2011. He co-chairs the France-China Committee, and also chairs the France-Algeria Council of Chief Executives within MEDEF International. He also chairs the "circular economy" group within AFEP.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of Criteria Caixa SAU (Spain), **Kaufman & Broad** (France) and the Institut du Capitalisme Responsable (France)
Chairman of the Board of Directors of the Université de technologie de Compiègne (France)

Expired during the last five years

Terms of office in various companies within the SUEZ Group.

12

(1) **In bold**: listed company.

Bertrand Camus

53 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Chief Executive Officer of SUEZ

Offices and positions held at the Company:
Chief Executive Officer and Director

Number of SUEZ shares held:
10,287 shares
4,230.61 units of the Company mutual fund, SUEZ Actionnariat France, acquired under the SUEZ Group Employee Shareholding Plans

BIOGRAPHY

Bertrand Camus has served as Chief Executive Officer of SUEZ Group since May 14, 2019. After graduating from the École nationale des Ponts et Chaussées he joined the Group in 1994. He was Chief Operating Officer of the subsidiary Aguas Argentinas from 2000 to 2006, then Director of Internal Audit at SUEZ. From 2008 to 2015, he was Chief Executive Officer of Water in North America, then in 2015 he was appointed Deputy CEO of the Water Europe division and CEO of Water France at SUEZ. In March 2018, he became Deputy CEO of SUEZ in charge of the Africa, Middle East, India, Asia and Australia regions.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Terms of office within the SUEZ Group: Director of SUEZ NWS Ltd (Hong Kong) and of **Lydec SA** (Morocco)

Expired during the last five years

Terms of office within various SUEZ Group companies.

(1) **In bold**: listed company.

Nicolas Bazire

62 years old
French

Business address:
Groupe Arnault
22, avenue Montaigne
75008 Paris,
France

Main position:
Chief Executive Officer of Groupe Arnault SAS

Offices and positions held at the Company:
Independent Director and member of the Audit and Financial Statements Committee and the Appointments, Compensation and Governance Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Nicolas Bazire, born on July 13, 1957, is a graduate of the French Naval Academy and the Institut d'études politiques de Paris, and studied at the École nationale d'administration. Nicolas Bazire was an auditor and then an auxiliary judge at the Cour des comptes. In 1993, he became Chief of Staff for Prime Minister Édouard Balladur. Managing Partner of Rothschild & Cie Banque from 1995 to 1999, Nicolas Bazire was then appointed Chairman of the Partnership Board. He has served as Chief Executive Officer of Groupe Arnault SAS since 1999.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **Carrefour SA** (France), **Atos** (France) and **SBM** (Monaco)
Manager of Les Chevaux de Malmain SARL (France)
Terms of office within LVMH Group/groupe Arnault: Chief Executive Officer of Groupe Arnault SAS (France), Chief Operating Officer and permanent representative of Groupe Arnault SAS and Director of Financière Agache SA (France), Vice-Chairman of the Supervisory Board of Les Échos SAS (France), Director of LVMH Fashion Group (France), **LVMH Moët Hennessy-Louis Vuitton SA** (France), the Louis Vuitton Foundation (France), Financière Agache Private Equity SA (France), Agache Développement SA (France), Europatweb SA (France), **Christian Dior** (France), and Groupe Les Échos SA (France), and member of the Supervisory Committee of Montaigne Finance SAS (France) and Semyrhamis SAS (France)

Expired during the last five years

Chairman of Tajan SA (France) and Go Invest SA (Belgium).

(1) **In bold**: listed companies.

Miriem Bensalah-Chaqroun

57 years old
Moroccan

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Vice-Chairwoman and Chief Executive Officer of Eaux Minérales d'Oulmès

Offices and positions held at the Company:
Independent Director and Chairwoman of the Strategy Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Miriem Bensalah-Chaqroun was born on November 14, 1962 and received an MBA in International Management and Finance from the University of Dallas. She held various positions at Société Marocaine de Dépôt et de Crédit from 1986 to 1989 before joining the Holmarcom Group (the family holding company) in 1990. She is currently Vice-Chairwoman and Chief Executive Officer of Eaux Minérales d'Oulmès. From 2012 to 2018, she was also Chairwoman of the Conféderation Générale des Entreprises du Maroc, Morocco's employers' association.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Chairwoman of the Board of Directors of Orangina Maroc (Morocco)
Director of **Renault** (France) and of Bank Al Maghrib (Central Bank of Morocco)
Terms of office within the Holmarcom Group: Director of Holmarcom (Morocco), Vice-Chairwoman and Chief Executive Officer of **Eaux Minérales d'Oulmès** (Morocco), and Chairwoman and Chief Executive Officer of Oulmès Drinks Development (Morocco)

Expired during the last five years

Director of Eutelsat Communications (until 2017).

(1) **In bold**: listed companies.

Franck Bruel

57 years old
French

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris–La Défense,
France

Main position:
Deputy CEO in charge of the UK, LATAM and NORAM (USA, Canada) BUs at ENGIE

Offices and positions held at the Company:
Director

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Franck Bruel, born on July 8, 1962, has served as Deputy CEO of ENGIE and has been a member of the Executive Committee and head of the UK, LATAM and NORAM (USA, Canada) BUs since May 1, 2019. Prior to that, he was Deputy CEO of ENGIE and Head of the France BtoB BU since December 2016. Franck Bruel has extensive experience in the services industry, both in France and abroad. He began his career at L'Oréal before joining the Pinault Distribution Group, followed by the Samse Group, where he held marketing and sales positions. In 2000, he joined Saint-Gobain where he was successively appointed President of the Paris Region for the Point P Group, then Chief Executive Officer of Dahl in Sweden in 2004, and Chief Executive Officer of Point P in 2006. In 2010, he joined the family-owned Group Sonepar (world leader in the distribution of electrical equipment) as Chief Operating Director, before being appointed Chief Executive Officer of the Sonepar Group. He joined ENGIE in 2016. In 2018, Franck Bruel published a book called *L'Énergie Efficace – Quand moins et mieux font plus (Efficient Energy, When Less and Better Means More)*. It has been translated into two languages.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

Director of ANTALIS International from 2017 to 2019
Various offices held within the ENGIE Group between 2016 and 2019
Various offices held within the Sonepar Group between 2010 and 2016.

12

Francesco Caltagirone

51 years old
Italian

Business address:
Cementir Holding SpA
200, corso di Francia
00191 Rome,
Italy

Main position:
Chairman and Chief Executive Officer of Cementir Holding N.V.

Offices and positions held at the Company:
Independent Director and member of the Strategy Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Francesco Caltagirone Jr. was born in Rome on October 29, 1968. He began working at his family's company at the age of 20. After six years of experience in the building sector, he joined the Cementir Group in 1995. The company operates in the cement sector (specifically in the production and distribution of gray and white cement, ready-mix concrete, aggregates and concrete products) and also in waste management. He worked his way up in the Group and in 1996, at the age of 27, he became its Chairman and CEO. Over the last 20 years, Francesco Caltagirone Jr. has been Chairman and Chief Executive Officer of the Cementir Group, showing deep knowledge and extensive experience in the cement and recycling sectors. Through a series of mergers and acquisitions he led and transformed an Italian company into a Group having a multi-national presence in 18 countries and 5 continents, with EUR 1.2 billion in revenues and 3,000 employees.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Terms of office within the Caltagirone Group: Chairman of the Board of Directors of **Caltagirone SpA** (Italy), Chief Executive Officer of Aalborg Portland Holding AS (Denmark), Chairman and Chief Executive Officer of **Cementir Holding N.V.** (Italy) and Director of **Caltagirone Editore SpA** (Italy) (since April, 2018)

Expired during the last five years

Vice-Chairman of the Board of Directors of Cimentas AS (Turkey) and of Cimbeton AS (Turkey) (until April 18, 2017)
Director of Caltagirone Editore SpA (Italy) (until June 9, 2017) and ACEA SpA (Italy) (until April 27, 2017).

(1) **In bold**: listed companies.

Martha Crawford

52 years old
American and French

Business address:
Jack Welch College of Business & Technology
Sacred Heart University
5151 Park Avenue
Fairfield, CT 06825-1000,
USA

Main position:
Dean of Jack Welch College of Business (Sacred Heart University)

Offices and positions held at the Company:
Independent Director and member of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Martha Crawford, born on September 30, 1967, holds a PhD in Environmental Engineering and Chemistry from Harvard University (United States) and an MBA from Collège des Ingénieurs (France). From 1991 to 1999, she held numerous positions at the World Bank and the Asian Development Bank in the area of environmental infrastructures and technologies, before taking on the position of principal administrator in the OECD's Environmental Performance Division until 2007. She then became Vice President of Research and Development for Air Liquide Group before joining AREVA Group as Executive Vice President of Research and Innovation and member of the Executive Committee from 2011 to 2014. From 2014 to 2015, she was CEO of Advanced Research at the L'Oréal Group. She has also provided Research and Development consulting services to corporations and governments since April 2014. From 2013 to 2016, Martha Crawford was a Director at IPSEN Pharmaceuticals; she has been an Independent Director at Altran Technologies since 2015, where she chairs the Nominations and Compensation Committee and is a member of the Audit Committee. In July 2016, she joined the University of Harvard Business School (United States) as a Professor and expert in new technologies, innovation and development. She sits on the International Risk Governance Council (IRGC) and is also a member of the Health Effects Institute's Board of Directors in Boston, which advises the US Environmental Protection Agency on the effects of air quality regulations on human health. She is also a member of the advisory council of the Mayshad Foundation, an NGO that works to improve women's lives in French-speaking African countries. She has been the Dean of the Jack Welch College of Business (Sacred Heart University) since August 2019.

A US national, Martha Crawford acquired French citizenship in 1999 and has raised three children with dual citizenship.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **Altran Technologies** (France) (since 2015)
Vice-Chairwoman of the Initiative for Excellence Committee (IDEX) (since 2010)

Expired during the last five years

Director of Ipsen (until 2016).

(1) **In bold**: listed company.

Delphine Ernotte Cunci

53 years old
French

Business address:
France Télévisions
7, esplanade Henri de France
75015 Paris,
France

Main position:
Chairwoman of France Télévisions

Offices and positions held at the Company:
Independent Director and Chairwoman of the Audit and Financial Statements Committee

Number of SUEZ shares held:
2,088 shares

BIOGRAPHY

Delphine Ernotte Cunci, born on July 28, 1966, is a graduate of the École Centrale de Paris. She joined the France Telecom Group in 1989 and held various operational roles throughout the Group, particularly in research and development. Delphine Ernotte Cunci then pursued her career with commercial management responsibilities, as Director of the distribution agency and Centre Val-de-Loire Regional Director, before becoming Director of Communications and Sponsoring for France. From 2010 to August 2014, she was Deputy Chief Executive Officer of the France Telecom/Orange Group and Executive Director of Orange France in charge of operations for the France Telecom Group in France. She has been Chairwoman of France Télévisions since August 22, 2015.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Chairwoman of France Télévisions (France)
Chairwoman of the Board of Directors of CentraleSupélec (France) and École Nationale Supérieure de la Photographie in Arles (France)
Director of the cultural institution Le Cent-Quatre (France).

Expired during the last five years

—

Isidro Fainé Casas

77 years old
Spanish

Business address:
La Caixa
Avenida Diagonal 621-629
Torre 2 – Piso 11
08028 Barcelona,
Spain

Main position:
Chairman of Criteria Caixa

Offices and positions held at the Company:
Director and member of the Strategy Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Isidro Fainé Casas, born on July 10, 1942, is Chairman of the Board of Trustees of La Caixa banking foundation and Chairman of Criteria Caixa. He holds a Doctorate in Economics, an International Senior Managers Program certificate in Business Administration from Harvard Business School, and is a graduate in Senior Management from the IESE Business School. He is a member of the Spanish Royal Academy of Economics and Finance and the Spanish Royal Academy of Doctors. He began his professional career in the banking sector as Investment Manager for Banco Atlántico in 1964, and was appointed as Chief Executive Officer of Banco de Asunción in Paraguay in 1969. He took on various roles in financial institutions in Barcelona: Director of Human Resources at Banca Riva y Garcia (1973), Advisor and Chief Executive Officer of Banca Jover (1974) and Managing Director of Banco Unión (1978). In 1982, he joined La Caixa as Deputy CEO, subsequently taking on various other positions. In April 1991, he was appointed Executive Assistant Managing Director and then, in 1999, Chief Executive Officer of the bank, of which he served as Chairman from June 2007 to June 2014. Isidro Fainé Casas is Honorary Chairman of the Naturgy Energy Group, Vice-Chairman of Telefónica and Director of The Bank of East Asia. He currently chairs Confederación Española de Cajas de Ahorros (the Spanish Confederation of Savings Banks) and is Chairman of the World Savings Banks Institute and Vice-Chairman of the European Savings Banks Group (ESBG). He is also Chairman of Confederación Española de Directivos y Ejecutivos (the Spanish Confederation of Directors and Executives), the Spanish section of the Club de Roma (Club of Rome) and of the Circulo Financiero (the Financial Circle). He is also a member of the Board of Trustees of the Prado National Museum.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current[1]

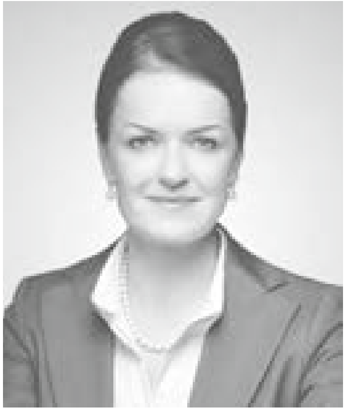
Terms of office within La Caixa Group or in companies in which La Caixa holds an equity interest: Chairman of the Board of Trustees of La Caixa banking foundation (Spain), Chairman of Criteria Caixa (Spain), Chairman of Caixa Capital Risc (Spain), Vice-Chairman of Inmo Criteria Caixa (Spain), Vice-Chairman of **Telefónica** (Spain) and Director of **The Bank of East Asia** (Hong Kong)

Expired during the last five years

Chairman of Gas Natural (until February 2018) and of CaixaBank (until June 2016)
Director of Banco BIP (until October 2016)
First Vice President of Repsol (until September 2016) and of Abertis (until May 2015).

(1) **In bold**: listed companies.

Judith Hartmann



50 years old
Austrian

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris–La Défense,
France

Main position:
Deputy Chief Executive Officer of ENGIE, Chief Financial Officer

Offices and positions held at the Company:
Director and Member of the Audit and Financial Statements Committee

Number of SUEZ shares held:
2,000 shares (as a loan granted by ENGIE)

BIOGRAPHY

Judith Hartmann, born on June 15, 1969, has been Deputy CEO and Chief Financial Officer of ENGIE since 2015. She is also responsible for steering ENGIE's publicly listed subsidiaries (supervision of GTT and coordination with SUEZ) and in charge of Corporate Social Responsibility (CSR). She serves on the Unilever Board of Directors. Judith Hartmann has extensive experience as a financial and operations manager in both services and industry, expertise she has refined in seven countries, particularly in the United States, Brazil, the United Kingdom, and Germany. She began her career in 1993 at the Canadian Department of Transportation in Ottawa. In 1997, she joined the Finance Department at the Walt Disney Company Europe in France. In 2000 she joined GE, where she held various positions over 12 years, first in finance at GE Healthcare Europe in France, and later at the headquarters of GE Healthcare in the United States before becoming Chief Financial Officer of a subsidiary of GE Healthcare in 2004 and of GE Water Europe, Middle East & Africa (GE Energy) in Belgium (2007). She was appointed CFO in 2009 in Brazil, then Chief Executive Officer of GE Healthcare Latin America. In 2011, she was appointed CFO of GE Germany. In 2012, she was appointed CFO and member of the Management Committee of the German Group Bertelsmann and non-executive Director of the RTL Group, and was a member of the Board of Directors of Penguin Random House LLC and Gruner & Jahr AG & Co KG until the end of 2014. In 2015, she was appointed Deputy CEO and Chief Financial Officer of ENGIE. Then, in 2016, she was entrusted with overseeing ENGIE operations in the United Kingdom and North America on top of her existing responsibilities. Judith Hartmann received a Master's in International Business Administration and a Doctorate in Economics from WU Vienna University of Business Administration & Economics.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Non-executive Director at **Unilever** (United Kingdom/Netherlands)
Terms of office within the ENGIE Group: Director of Electrabel (Belgium) and of the ENGIE Foundation (France).

Expired during the last five years

—

(1) **In bold**: listed company.

Isabelle Kocher

53 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Director

Offices and positions held at the Company:
Director and member of the Strategy Committee and the Appointments, Compensation and Governance Committee

Number of SUEZ shares held:
4,475 shares (of which 2,000 as a loan granted by ENGIE)

BIOGRAPHY

Isabelle Kocher, born on December 9, 1966, is a graduate of the École Normale Supérieure (ENS-Ulm) and a member of Corps des Mines. In 1997, she was appointed Budget Officer for Telecommunications and Defense at the French Ministry of the Economy. She was Industrial Affairs Advisor to the French Prime Minister's Office between 1999 and 2002. In 2002, she joined the SUEZ Group, where she held various positions (from 2002 to 2005 in the Strategy and Development Department; from 2005 to 2007 as Director of Performance and Organization; from 2007 to 2008 as Deputy Chief Operating Officer of Lyonnaise des Eaux; from 2009 to October 2011 as Chief Executive Officer of Lyonnaise des Eaux, in charge of water development in Europe). She was Deputy CEO of ENGIE in charge of Finance from October 2011 to November 2014. Isabelle Kocher was then appointed as Chief Operating Officer and Director of ENGIE. She has been Chief Executive Officer of ENGIE from May 3, 2016 to February 24, 2020.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

Director of Axa (until April 25, 2018) (France)
Chief Executive Officer and Director of ENGIE (France) (until February 24, 2020)
Terms of office in various companies within the ENGIE Group.

Anne Lauvergeon

60 years old
French

Business address:
ALP
27 avenue Pierre 1er de Serbie
75016 Paris,
France

Main position:
Chairwoman and Chief Executive Officer of ALP

Offices and positions held at the Company:
Independent Director, Chairwoman of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee, member of the Strategy Committee and member of the Audit and Financial Statements Committee

Number of SUEZ shares held:
2,570 shares

BIOGRAPHY

Anne Lauvergeon, born on August 2, 1959, is a Chief Engineer from the École des Mines, a former student of the École Normale Supérieure, and also has a degree in Physics. She started her career in 1983 in the steel industry at Usinor. In 1984, she studied chemical safety-related issues in Europe for the Commissariat à l'Énergie Atomique (CEA), the French nuclear energy authority. From 1985 to 1988, she was in charge of subsoil administration in Île-de-France. In 1988, she was appointed Deputy Department Head at the Conseil Général des Mines. In 1990, Anne Lauvergeon was appointed Special Assistant for International Economy and Trade to the President of France, and in 1991 she was named Deputy Chief of Staff and Representative to the President of France for the organization of international summits (G7/G8). In 1995, she joined Lazard Frères as Managing Partner. In March 1997, Anne Lauvergeon joined the Alcatel Group as Deputy CEO of Alcatel Télécom. She joined the Executive Committee of the Alcatel Group in 1998. She supervised the Group's international activities and was in charge of the Group's shareholdings in the defense, energy, transportation and nuclear power sectors (Thomson, CSF, Alstom, Framatome). From June 1999 to July 2011, Anne Lauvergeon was appointed Chairwoman and Chief Executive Officer of COGEMA (now Areva NC). She founded Areva in June 2001. She was Chairwoman of the Board of the Areva Group from July 2001 to June 2011. Since 2011, Anne Lauvergeon has been the Chair of ALP, a consultancy and investment firm. Since 2013, Anne Lauvergeon has been Chairwoman of the Innovation Commission 2030. In 2014, she was appointed Chairwoman of the Board of Directors of Sigfox. In 2018, Anne Lauvergeon was appointed Co-Chairwoman of the Innovation Commission of the French employers' federation (MEDEF).

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Chairwoman and Chief Executive Officer of ALP (France)
Chairwoman of the Board of Directors of Sigfox (France) and of IB2 (France)
Director of **American Express** (United States), **Koç Holding** (Turkey), Avril Gestion (France), AMR (France), Bloom (France), Verelec (France) and Workwell (United States)

Expired during the last five years

Chairwoman of the Board of Directors of BoostHeat (until September 29, 2017)
Director of Rio Tinto (until May 4, 2017), Airbus (until May 2016) and Total (until May 29, 2015).

(1) **In bold**: listed companies.

Gérard Mestrallet

71 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Director

Offices and positions held at the Company:
Director and member of the Appointments, Compensation and Governance Committee

Number of SUEZ shares held:
16,913 shares (of which 2,000 as a loan granted by ENGIE)

BIOGRAPHY

Gérard Mestrallet, born on April 1, 1949, is Honorary Chairman of ENGIE and SUEZ. He chairs the Foundation Agir Contre l'Exclusion (FACE) and the organization Paris Europlace (which promotes Paris as a marketplace). A former student of the École polytechnique, the École nationale de l'aviation civile, the Toulouse Institut d'études politiques and the École nationale d'administration, he began his career in the State Department of Treasury. He was a technical advisor for industrial affairs for the Minister of Economy and Finance (Jacques Delors) before joining Compagnie Financière de SUEZ in 1984. In 1991, he was Chairman of the Management Committee at Société Générale de Belgique, and in 1995, he became Chairman and Chief Executive Officer of Compagnie de SUEZ. From July 2008 to May 2016, Gérard Mestrallet was Chairman and Chief Executive Officer of GDF SUEZ (which became ENGIE in 2015). He was Chairman of the Board of Directors of SUEZ from 2008 to May 2019. In addition to several other directorships (Société Générale, Saudi Electricity Company, member of the Beijing, Chongqing, and Moscow Council of Mayors), Gérard Mestrallet took over the executive chairmanship of the Agence Française pour le développement d'Al Ula (French Agency for the Development of Al Ula) in Saudi Arabia at the request of the French Head of State. The Agence française pour le développement d'Al Ula is a French organization responsible for regional tourism and cultural development in cooperation with Saudi Arabia.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **Société Générale** (France) and **Saudi Electricity Company** (Saudi Arabia)

Expired during the last five years

Chairman of the Board of Directors of SUEZ (until May 14, 2019)
Chairman of the Board of Directors of ENGIE (until May 18, 2018)
Member of the Supervisory Board of Siemens AG (until January 31, 2018)
Chairman and Chief Executive Officer of ENGIE (until May 3, 2016)
Director of Saint-Gobain (until June 4, 2015)
Terms of office in various ENGIE Group and SUEZ Group companies.

(1) **In bold**: listed companies.

Pierre Mongin

65 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Senior advisor to Greenhill

Offices and positions held at the Company:
Director and member of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee

Number of SUEZ shares held:
2,000 shares (as a loan granted by ENGIE)

BIOGRAPHY

Pierre Mongin was born on August 9, 1954 and holds a Master's degree in Economics from the University of Paris I, as well as degrees from the Institut d'études politiques de Paris and the École nationale d'administration (Voltaire Class). In 1980, he held the position of Deputy Prefect in the Ain, Ariège and Yvelines departments. He became a technical advisor for the National Police in the French Interior Affairs Ministry in 1984, and then advisor to the Interior Affairs Minister for local authorities, and finally Chief of Staff to the deputy minister for the local authorities. He was in charge of administrative and financial affairs and relations with the Paris Council at the Paris Prefecture of Police from 1988 to 1993. In 1993, he became Chief of Staff to Prime Minister Édouard Balladur and Advisor for French Overseas Departments and Territories. In April 1993, he was appointed Prefect, first in the Eure-et-Loir, then in the Vaucluse, and from 1995 to 2004, Prefect of the Auvergne region and Prefect in the Puy de Dôme, where he was appointed Chief of Staff to the Minister of the Interior, and then in 2005 Chief of Staff to the French Prime Minister. From 2006 to 2015, he was Chairman and CEO of RATP. He was Deputy CEO and General Secretary of ENGIE from July 1, 2015 to July 1, 2019, when he became Senior Advisor to the Chief Executive Officer of ENGIE until December 31, 2019. He became Senior Advisor to Greenhill in January 2020.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Chairman of the Audit Committee and Director of CMA-CGM (France)
Director of Swisslife France (France)

Expired during the last five years

Chairman and CEO of RATP (2006 to 2015)
Chairman of Systra and Director or Culturespaces
Various terms of office within ENGIE Group.

Guillaume Pepy

61 years old
French

Business address:
25 rue Taitbout
75009 Paris,
France

Main position:
Director

Offices and positions held at the Company:
Independent Director and Chairman of the Appointments, Compensation and Governance Committee and member of the Strategy Committee

Number of SUEZ shares held:
2,100 shares

BIOGRAPHY

Guillaume Pepy, born on May 26, 1958, studied at the École nationale d'administration and is a Legal Advisor to the Conseil d'État (France's highest administrative court). Guillaume Pepy has held various roles at SNCF (Director of Main Lines, then Investment, Economy and Strategy Director, Deputy Chief Executive Officer, then Chairman and Chief Executive Officer, then Chairman of the Management Board from February 2008 to October 2019) and in ministerial offices (technical advisor to the office of Michel Charasse, then Chief of Staff for Michel Durafour and Chief of Staff for Martine Aubry).

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

Chairman of the SNCF (France) Executive Committee (until October 2019)
Chairman and Chief Executive Officer of SNCF Mobilités (France) (until October 2019)
Member of the Supervisory Board of Systra (France) (until March 19, 2018).

Brigitte Taittinger-Jouyet

60 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Director

Offices and positions held at the Company:
Independent Director and member of the Appointments, Compensation and Governance Committee and of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Born on August 7, 1959, Brigitte Taittinger-Jouyet is a graduate of the Institut d'études politiques de Paris and holds a Master's in History from the Faculty of Human Sciences at Reims University. In 1984, she was appointed Advertising Manager at Publicis, before joining the Marketing Department within the Taittinger Group in 1988, where she was in charge of industrial and hotel companies. From 1991 to 2012, she was Chairwoman and CEO of the perfume company Annick Goutal. From 1995 to 2015, she was also Vice-Chairwoman of Baccarat. Between 2013 and 2017, she was Director of Strategy and Development at Sciences Po Paris. She has been also a Director of HSBC France since 2008 and of Fnac Darty since 2014. She was a Director of Centre Pompidou from 2013 to 2019.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of HSBC France (France) and **Fnac Darty** (France)

Expired during the last five years

Director of Miller Harris (subsidiary of Neo Capital), Addoha Group and the Centre Pompidou (until 2019).

(1) **In bold**: listed company.

Directors representing employees

Enric Xavier Amiguet i Rovira

51 years old
Spanish

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Project Development at the Communication and Marketing Department of SUEZ Spain

Offices and positions held at the Company:
Director elected by employees (nominated by the European Works Council) and member of the Strategy Committee and the CSR, Innovation, Ethics, Water and Sustainable Planet Committee

Number of SUEZ shares held:
87 shares
41.37 units of the SUEZ Shareholding international mutual fund

BIOGRAPHY

Enric Xavier Amiguet i Rovira, born on November 21, 1968, is a graduate of the Catalan School of Public Relations and holds a marketing degree from the ESIC Business and Marketing School. He also holds an Executive MBA from EADA Business School and participated in several training programs at the IFA. He joined Aguas de Barcelona in 1996, where he has held various positions. He started out in the Office of the Chairman in charge of Protocol, Public Relations and Press. In 2002, he joined the safety department, where he was responsible for customer relations. He then worked in the corporate marketing department, with a particular focus on digital and environmental matters. Since 2010, he has held project development roles within the customer management department. He is currently developing projects at the Corporate Communication and Marketing Department of SUEZ Spain.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

Agatta Constantini

55 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Technical advisor at SUEZ

Offices and positions held at the Company:
Director elected by employees (nominated by the France Group Work Council), member of the Appointments, Compensation and Governance Committee and Strategy Committee

Number of SUEZ shares held:
136 shares
159.35 units of the SUEZ Actionnariat France mutual fund

BIOGRAPHY

Agatta Constantini, born on February 23, 1965, holds a diploma in secretarial studies and communications. She joined Lyonnaise des Eaux in 1993 as a receptionist. She then became a switchboard operator. She participated in the creation of network scheduling in 1999 and held various positions there until 2007. She was appointed store manager in 2007, then senior purchasing technician in 2008. Agatta Constantini is currently a technical advisor at SUEZ.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

Director representing employee shareholders

Guillaume Thivolle

60 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris–La Défense,
France

Main position:
Project Director within the Group Human Resources Department (Training Department)

Offices and positions held at the Company:
Director representing employee shareholders, member of the Audit and Financial Statements Committee and the CSR, Innovation, Ethics, Water and Sustainable Planet Committee

Number of SUEZ shares held:
38 shares
452.6 units of the SUEZ Actionnariat France mutual fund

BIOGRAPHY

Guillaume Thivolle was born on July 16, 1959. He holds a diploma from the École Supérieure d'Administration des Entreprises (Paris), and has worked in several industrial groups: Pernod Ricard, Grosfillex and Alcatel, before joining the Environment sector, first with GLS and later with the IRH Ingénieur Conseil Group. He joined the teams at Degrémont in January 2011 and was then appointed, within the SUEZ Group, to head up the Water Treatment Services Development Division. He is now a Project Director in the SUEZ Group's Human Resources Department.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

Under the declaration of interests that must be made yearly by the Directors of the Company in accordance with the Code of Conduct relating to the prevention of market abuse, none of the members of the Board of Directors has declared to the Company that he/she:

- has family ties with other members of the Company's Board of Directors (including the Chairman or the Chief Executive Officer);
- has been convicted of fraud in the last five years;
- has participated as a manager in any bankruptcy, receivership or liquidation in the last five years;
- has been incriminated or received an official public sanction by statutory or regulatory authorities;
- has been barred by a court of law from acting as a member of an administrative, management or supervisory body of any issuer or participating in the management or business of any issuer in the last five years.

12.1.2 Management bodies

In order to successfully perform his mission, the Chief Executive Officer is assisted by an Executive Committee, which is an analysis and decision-making body that examines the Group's major decisions and strategic objectives, and meets every two weeks.

The Executive Committee's membership changed on January 1, 2020. As of the date of this document, the Committee includes 10 members alongside Bertrand Camus:

Jacques Audibert has been General Secretary of the Group since June 2018. He is a former student of the ENA and graduate of the École Supérieure de Journalisme de Strasbourg. Jacques Audibert was a journalist for Radio France and served as an advisor to Roger Fauroux, Minister for Industry and Regional Development in 1988. He then held several positions within the Ministry of Foreign Affairs in Paris, Bonn, Hanoi, London and Quebec. He was Head of Political Affairs and Security within the Ministry of Foreign Affairs from 2009 to 2014, then Diplomatic Advisor and G7 and G20 Representative to the French President from May 2014 to May 2017. He joined the Group on July 1, 2017 as Deputy General Secretary.

Jean-Marc Boursier has been Senior Executive Vice President Group for the France Region and Group Chief Operating Officer since January 1, 2020. He is in charge of the following operation departments: Treatment Infrastructure Department, the Research, Innovation and Digital Transformation Department, the Information Systems Department, and the Performance Department. Jean-Marc Boursier is a telecom engineer who holds a master's degree in international finance from HEC Paris. He joined the Group in 1999 where he held various positions in finance (Control, Mergers and Acquisitions, Planning) before becoming Chief Financial Officer of SUEZ in 2004, then Deputy CEO in charge of Finance, Procurement, and the Consulting Subsidiary in 2013. From 2015 to 2018, he was Group Deputy CEO for the Recycling and Recovery Europe segment. Since May 2019, he was Senior Executive Vice President in charge of Operations and Recycling and Recovery activities for Northern Europe and hazardous waste recovery activities in Europe. Jean-Marc Boursier is also President of the European Federation of Waste Management and Environmental Services (FEAD) as well as an Officer of the Alliance to End Plastic Waste.

Isabelle Calvez has been the Chief Human Resources Officer since April 18, 2017, the date she joined the SUEZ Group. A graduate of the Institut d'études politiques de Paris, she began her career at Thalès Group, where she held positions in both Human Resources and Operations, then at Canal+ Group before being appointed Head of Human Resources France and Benelux at Accenture in 2003 and Head of Group Human Resources at Groupama in 2007. In 2012, Isabelle Calvez was appointed Head of Human Resources for Carrefour France.

Christophe Cros is Senior Executive Vice President Group in charge of the North America Region and Chairman of Water Technologies and Solutions (WTS). A former student at the ENA and a graduate of the Institut d'études politiques de Paris, Christophe Cros began his career as a magistrate at the Cour des comptes (1985-1989) and then as Head of Financial Organization for the Centre National des Caisses d'Épargne. He joined the SUEZ Group in 1991 as Chief Operating Officer then Chief Executive Officer of Crédisuez from 1995 to 1998 before being appointed Chief Operating Officer of SITA (now SUEZ) in 1999, then of SUEZ in 2004, and Chief Executive Officer of SITA France in 2007. In 2013, he became Senior Executive Vice President in charge of the Recycling and Recovery Europe, then took over Finance in 2015.

Diane Galbe has been Senior Executive Vice President Group in charge of the global Business Unit Smart Environmental & Solutions since January 1, 2020. She is also Head of Group Strategy and the "Shaping SUEZ 2030" transformation plan. She is also now a member of the Executive Committee. The purpose of the new Smart & Environmental Solutions business unit is to speed up the international development and roll-out of digital and decentralized solutions, performance-based and environmental quality-based solutions, consulting activities, as well as new smart city, smart agriculture, climate and air business activities. Diane Galbe is a graduate of business law from the *magistère* of Université Paris II Panthéon-Assas and is a former lawyer at the Bredin Prat firm. She joined SUEZ Group in 2007, where she had various responsibilities in both the corporate functions in Paris and for the Asian business unit in Hong Kong. She was then appointed Chief of Staff for the Group Chief Executive Officer in 2013. In January 2017, she became Head of Finance and Strategy of the Italy, Central Europe and Eastern Europe business unit as well as Global Market Director for the Construction, Decommissioning and Materials Sector. Since May 2019, Diane Galbe was Senior Executive Vice President of Group Strategy and the SUEZ 2030 Project.

Ana Giros is Senior Executive Vice President Group in charge of the APAC (Asia, Australia and India) and AMECA (Africa, the Middle East and Central Asia) Regions and of Industrial Key Accounts. She is a graduate of the Université Polytechnique of Barcelona and of INSEAD. She held various international positions at Alstom Transport starting in 1997, before becoming Chief Executive Officer of the Services Division in November 2009 and CEO of Alstom France in May 2014. She joined SUEZ Group in October 2015 and became Chief Executive Officer of the Latin America and Key Industrial Accounts business unit in December 2016. Since May 2019, Ana Giros was Senior Executive Vice President Group of International, and directly Africa, the Middle East, India, Asia, Australia, the Consulting Business, and Key Industrial Accounts.

Tiphaine Hecketsweiler has been Chief Communications Officer for the Group since July 15, 2019 and Chief Engagement and Communications Officer since January 1, 2020. Tiphaine Hecketsweiler graduated from the Université de Panthéon-Sorbonne and holds a DESS in Corporate Finance and Financial Engineering from Université Paris IX-Dauphine. In 1990, she began her career at France Telecom Mobiles, then at Experian in London. After being a consultant at Image 7, she joined Atos as Deputy Head of Communications in charge of the brand, media relations and internal communications, then Head of Communications at Worldline. In 2017, she was appointed Chief Communications Officer at AccorHotels Group.

David Palmer-Jones has been Senior Executive Vice President Group of the Northern Europe Region since January 1, 2020. He holds a master's degree in marketing from the University of Leeds in England. David joined the Group in 1989 as Head of Business Development for SITA UK, and in 1996 became Chief Executive Officer of Milijöservice Sweden, then Director of Development of SITA Scandinavia before becoming Chief Operating Officer of SITA Sweden, then CEO. In 2006, he was appointed Director of Industrial and Commercial Waste, Recycling & Recovery UK. Since 2008, David Palmer-Jones was Chief Executive Officer of the UK and Scandinavia business unit.

Angel Simon is Senior Executive Vice President Group of Southern Europe (Spain, Italy and Greece) and Latin America. Angel Simon holds a degree in civil engineering from the Universidad Politécnica in Barcelona (1980) and an MBA from ESADE. He joined Agbar in 1995 and became Chief Executive Officer of Aguas Andinas, SA in Chile in 1999, then Aguas de Barcelona in 2002 and the Agbar Group in 2004. He became Chairman of the Group in 2010. Since May 2019, he was Senior Executive Vice President in charge of Spain, Latin America and the Advanced Solutions & Smart Cities business activities.

Julian Waldron has been Senior Executive Vice President Group in charge of Finance since January 1, 2020. He joined the Group on May 15, 2019. Julian Waldron is a graduate of the University of Cambridge and began his career at S.G. Warburg before joining Thomson as Chief Financial Officer, then becoming interim Chief Executive Officer. Previously, and since 2017, he was Director of Operations and Senior Executive Vice President of TechnipFMC, and from 2008 to 2017, Chief Financial Officer of Technip Group.

The Company has a Performance Management Committee – a body responsible for managing operating performance, business development, business-specific expertise and Group corporate culture. It comprises members of the Executive Committee as well as senior managers in operations and certain global functions. Its exact composition is detailed on the Company's website (www.suez.com).

12.2 Conflicts of interest within administrative bodies and General Management

The Company has put in place various mechanisms to prevent any conflict between the private interests of its Directors and those of the Company.

The Director's Charter (as annexed to the Board of Directors' Internal Regulations) stipulates that every Director must inform the Board of any conflict of interest, even potential, in which he or she could be directly or indirectly involved. In the event that a Director cannot avoid being in conflict of interest, he or she must refrain from participating in discussions and any decisions on the relevant matters.

Moreover, the Board of Directors, under the recommendation of the Appointments and Compensation Committee, adopted a Code of Conduct in 2012 in relation to the prevention of market abuse, updated in 2016 in order to take into account the provisions of EU Regulation 596/2014. This code:

- sets internal procedures for identifying privileged information and, as the case may be, for deciding to defer the publication of such information;
- recalls legal and regulatory provisions concerning crime and insider trading, and the rules applicable to the Company's list of insiders;
- sets "blackout periods" during which members of the Board of Directors, Executive Committee, and certain management positions having access to Company financial information before its publication must withhold from engaging in transactions involving Company shares, as follows:
  - a period of 30 days prior to the publication of the Company's annual and interim results, until two days after their publication, and
  - a period of 15 days prior to the publication of the Company's first- and third-quarter results, until two days after their publication;
- recalls the obligation of Corporate Officers and certain "Top Executives" of the Group to report transactions involving Company shares;
- establishes the obligation for Directors to make an annual declaration of interests, indicating in particular any potential conflict of interest that could exist between their duties to the Company and other duties or private interests.

Under the declaration of interests made yearly by all the Directors of the Company at the end of 2019, none of the members of the Board of Directors (including the CEO) has declared to the Company that he/she is in potential conflict of interest between his/her duties toward the Company and other private duties or interests.

Furthermore, to the Company's knowledge, as of the date of this Universal Registration Document, no member of the Board of Directors or the Chief Executive Officer enjoy benefits as a result of service contracts between them and the Company or any of its subsidiaries.

13 Compensation and benefits

13.1 Compensation and benefits in kind

13.1.1 Compensation policies of Corporate Officers

Compensation policies of Corporate Officers described below were established in accordance with Article L. 225–37–2 of the French Commercial Code. These policies will be voted on by shareholders during the Combined Shareholders' Meeting of May 12, 2020-Resolutions 16 and 17 regarding the Chairman, Resolution 18 regarding the Chief Executive Officer, and Resolution 19 regarding the Directors.

These policies are established in line with the Company's best interest. As a result, they are based on the following shared principles:

- comparability and competitiveness: the Appointments, Compensation and Governance Committee makes recommendations and proposals and submits them to the Board of Directors, drawing on studies and analyses by independent experts of the market practices of similar companies. The competitiveness of the compensation policy is in the Company's interest so it can attract and retain premium senior executives;
- stability: the compensation policy must be sustainable as the criteria determining this compensation are only reviewed after long intervals. This policy may be adjusted, however, if this is necessary to adapt to changes in the objectives adopted by the Group, or in the event of a major operation with a significant impact on the Group's scope. The compensation policy of Corporate Officers is also reviewed by the Board of Directors in the event of their succession. The Board of Directors in this case carries out an overall analysis of the executive officer's situation and provides its opinion on all of the elements of his compensation taking into account the existing practices within the Company and the individual compensation awarded to the executive officer in the past;
- consistency: the compensation of Corporate Officers must be determined in line with that of the other senior executives when it relates to compensating an Executive Corporate Officer and other employees of the Company. The Board therefore monitors the evolution of compensation ratios (mentioned below) between Corporate Officers and Company employees on the one hand and Company performance on the other hand;
- measurement: the determination of compensation components must be the result of a fair balance taking into account the Company's corporate interest, the interest of its shareholders, market practices and the performance of executives, where applicable. However, this policy is applied differently depending on whether the Chairman of the Board, the Chief Executive Officer or the Directors are involved.

13.1.1.1 Compensation policy for the Chairman of the Board of Directors for the period from January 1 to May 12, 2020

The compensation policy for the Chairman recommended by the Appointments, Compensation and Governance Committee has been drawn up by the Board of Directors in accordance with the principles for determining compensation for Corporate Officers set out in the AFEP-MEDEF Code.

At the Board of Directors meeting on November 27, 2019, the Chairman of the Board, Jean-Louis Chaussade, confirmed that he was resigning from the Board at the end of his term of office, at the end of the Shareholders' Meeting on May 12, 2020. At its meeting on February 25, 2020, the Board of Directors reviewed the compensation policy it had determined for Jean-Louis Chaussade in 2019 in his capacity as Chairman of the Board of Directors, and confirmed that it would remain unchanged in 2020 for the remaining portion of his term of office.

As a result, the Chairman's compensation includes annual gross fixed compensation of EUR 250,000. The Chairman of the Board of Directors may also benefit from a company car.

The Chairman of the Board of Directors does not receive compensation for attending Board of Directors or Committee meetings. In accordance with the recommendations of the AFEP-MEDEF Code, the Chairman does not receive any variable compensation. The Board also voted that logistics resources (office, assistant, car and driver) would be made available to Jean-Louis Chaussade at the end of his term of office for a five-year period.

13.1.1.2 Compensation policy of the Chairman of the Board of Directors for the period from May 12 to December 31, 2020

During its meeting on January 31, 2020, the Board of Directors appointed Philippe Varin to succeed Jean-Louis Chaussade as Chairman of the Board starting on May 12, 2020, provided he is appointed as a Director by the Shareholders' Meeting.

During its meeting on February 25, 2020, the Board of Directors voted to change the compensation policy of the Chairman of the Board of Directors starting on May 12, 2020. If the compensation policy remains unchanged structurally, with fixed compensation and a company car, the amount of gross annual fixed compensation comes to EUR 375,000. It is also confirmed that the Chairman of the Board of Directors does not receive compensation for attending Board of Directors or Committee meetings, and he does not receive variable compensation, in accordance with AFEP-MEDEF Code recommendations. The increase in the Chairman of the Board of Directors' fixed compensation is due to the Board of Directors taking into account Philippe Varin's experience and the time needed to accomplish his mission. In addition, the amount of the Chairman's fixed compensation is still in line with market practices observed for non-executive chairmen.

13.1.1.3 Compensation policy for the Chief Executive Officer

The compensation policy recommended by the Appointments, Compensation and Governance Committee for the Chief Executive Officer has been drawn up by the Board of Directors in accordance with the principles for determining compensation for executive Corporate Officers set out in the AFEP-MEDEF Code. This policy, approved by the last Shareholders' Meeting on May 14, 2019, was reviewed by the Board of Directors during its meeting on February 25, 2020 without the Chief Executive Officer and management in attendance. In particular, the Board of Directors reviewed the ratios between the Chief Executive Officer's compensation and the compensation of Company employees, as described in section 13.1.2.3 of this chapter.

After noting that the previous compensation policy had been approved during the Shareholders' Meeting on May 14, 2019, the Board of Directors voted to confirm this policy. Against this backdrop, the Board took into account certain comments made during this meeting by clarifying the amount and ceiling of the long-term variable compensation as well as the retirement obligations made for the Chief Executive Officer.

Also, the Chief Executive Officer's compensation, which will be subject to approval by shareholders during the Shareholders' Meeting on May 12, 2020 under Resolution 18, contains the following elements:

► **Elements related to the Chief Executive Officer taking up office**

- **Welcome bonus:** in accordance with the AFEP-MEDEF Code, no allowance may be granted for the Chief Executive Officer taking up office when this individual is selected from the Group's existing executives.
  Bertrand Camus did not therefore receive a bonus following his appointment as Chief Executive Officer in 2019.
- **Employment contract:** the Chief Executive Officer, in accordance with the recommendation of the AFEP-MEDEF Code, terminated his employment contract with the Company by resigning. He will not receive any compensation following the termination of his employment contract.
  Bertrand Camus therefore terminated his employment contract by resigning on May 14, 2019 when he was appointed Chief Executive Officer.

► **Elements of compensation linked to the term of office of the Chief Executive Officer**

- **Annual fixed compensation:** the purpose is to retain and attract high-level and experienced executives *via* a consistent and competitive compensation plan. It is calculated taking into account the Chief Executive Officer's experience, seniority and common market practices for similar positions.
  It is intended to be stable, only changing over relatively long periods or following significant changes in the Group's scope.
  For 2020, upon the Appointments, Compensation and Governance Committee's recommendation, the Board of Directors has kept the Chief Executive Officer's fixed compensation at EUR 750,000 in accordance with these principles. This amount has been unchanged since 2009.
- **Annual variable compensation:** the purpose is to motivate and reward executives when the Company meets annual financial and non-financial objectives.
  The main characteristics of this annual variable compensation are as follows:
  - amount: between 0% and 150% of fixed annual compensation (the achievement of set objectives corresponds to a variable amount equivalent to 100% of fixed compensation),
  - conditions governing compensation: the award of compensation is based on achieving specific, predetermined, diversified and demanding objectives that enable a comprehensive analysis of performance aligned with corporate issues and strategy and with shareholders' interests. These objectives must include both quantifiable financial criteria (accounting for 75% of the award), determined in accordance with the objectives and forecasts released by the Group to the market, with levels that can be observed by the public, or related to Group commitments on social and environmental responsibility, and criteria that are qualitative in nature (accounting for 25% of the award) over the course of a year. The Company does not foresee requesting a full or partial return of the annual variable compensation paid to the Chief Executive Officer.

  The annual variable compensation amount that may be awarded for each of the quantifiable criteria is calculated as follows:

	Minimum	Target objective	Maximum	Remarks
Quantifiable criteria	Amount equal to 0 if less than 85% of the target objective is achieved.	Amount equal to 100% if 100% of the target objective is achieved.	Amount equal to 150% if 120% of the target objective is achieved.	Linear calculation between milestones.

For 2020, upon the Appointments, Compensation and Governance Committee's recommendation, the Board of Directors has set the applicable performance criteria for the annual variable compensation as follows, and the financial criteria is in line with the indicators used for forecasts and the Strategic plan communicated to the market in October 2019:

- quantifiable criteria, representing 75% of the overall weighting of the variable amount, relating to EBIT (20%), Recurring Free Cash Flow (20%), Recurring Earnings Per Share (25%), and the Group's Health and Safety results (10%), and
- qualitative criteria, representing 25% in the overall weighting of the variable amount, concerning the implementation of SUEZ's 2030 strategic plan (focusing on environmental, corporate and social responsibility, management, labor and innovation).

The rate of achievement of the performance criteria will be assessed by the Board of Directors at its meeting to approve SUEZ's 2020 Consolidated Financial Statements.

In accordance with Article L. 225–100–III of the French Commercial Code, the payment of annual variable compensation is subject to approval at the annual Shareholders' Meeting called to approve the 2020 financial statements.

- **Long-term variable compensation:** it is intended primarily to retain executives and align their interests with those of the Company and its shareholders. This long-term variable compensation is granted under a plan that has a large group of recipients (around 1,700 people in 2019, for example).
The main characteristics of the long-term variable compensation are as follows:
  - type: fully linked to the Company's share price and may take the form of performance units (variable compensation in cash, in an amount which is indexed to the share price) or performance shares,
  - amount and ceiling: the target amount (based on SUEZ's share price on the day it is granted) of the Chief Executive Officer's long-term variable compensation corresponding to meeting pre-defined performance conditions, equals 70% of his fixed compensation, the maximum amount of this compensation (if the Group outperforms its targets) is capped at 140% of fixed compensation,
  - performance conditions: this variable long-term compensation is fully subject to the achievement of performance conditions, assessed over a minimum period of three years. The "internal" performance condition(s) is/are established based on one or more financial indicators audited and disclosed by the Company, in line with the forecasts, strategy and/or objectives published by the Group, or in line with the Group's budget and medium-term plan (*e.g.* recurring net income and recurring free cash flow for the most recent long-term variable compensation plans introduced). The "external" performance condition allows an assessment of the Company's performance compared to a group of comparable companies (for example through the average change in the Company's Total Shareholder Return (TSR) over a three-year period, compared to the change in the TSR of the Euro Stoxx Utilities index over the same period). A non-financial performance condition related to the Group's corporate social and environmental responsibility policy is also included,
  - service condition: the allocation of long-term variable compensation is subject to a service condition of a minimum of three years. This means that, if the Chief Executive Officer leaves before he has met the service condition, his entitlements under the long-term compensation plans will be lost, unless the Chief Executive Officer retires, in which case the entitlements will be maintained in their entirety, but will still be subject to performance conditions. If he leaves following a forced departure due to a change of control or strategy, his entitlements will be prorated according to the length of his service within the Group, but will still be subject to performance conditions,
  - obligation to hold shares: the Chief Executive Officer has agreed, until the end of his or her term of office, to hold 25% of the performance shares vested, or to reinvest in shares 25% of the amount actually received for performance units, up to a number of registered shares held by the Chief Executive Officer equal to twice the fixed compensation. Finally, the Chief Executive Officer has agreed not to engage in hedging transactions with respect to the performance shares or stock options that he or she receives from the Company.

  It is not possible for the Company to ask for this long-term compensation to be returned.

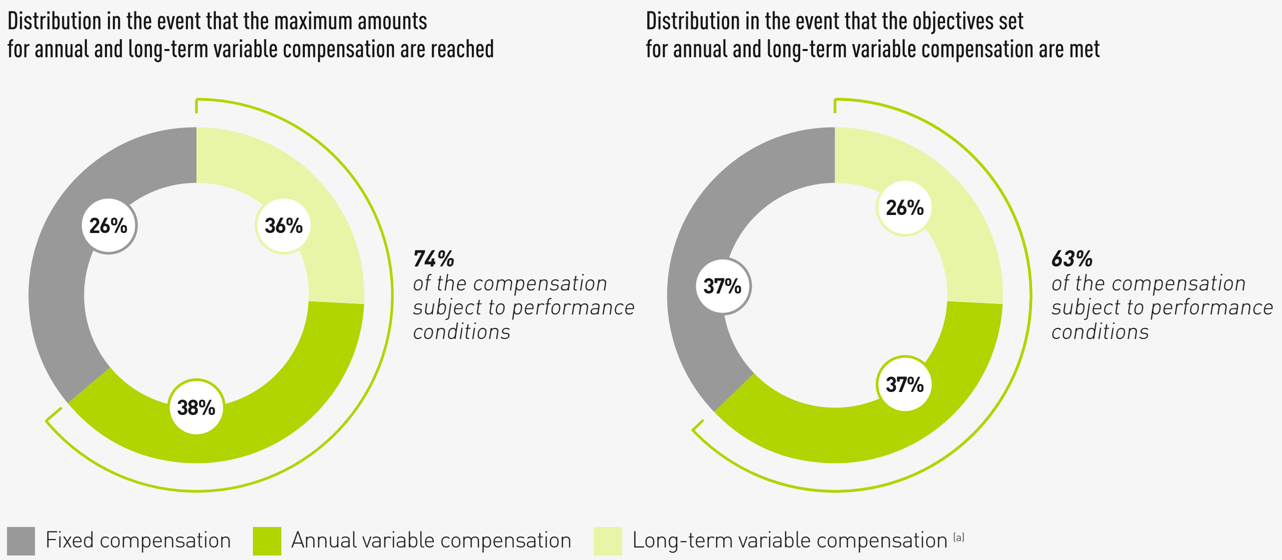
- **Exceptional compensation:** in accordance with Article 24.3.4 of the AFEP-MEDEF Code, the Board of Directors may decide to pay exceptional compensation to the Chief Executive Officer only under circumstances resulting in a significant change in the scope of the Group. In this case, payment of this exceptional compensation would then be entirely subject to the achievement of the performance conditions.

  Since the Company's IPO in 2008, the Board of Directors has only awarded exceptional compensation once, in connection with the acquisition of GE Water & Process Technologies in 2017. Also note that, in accordance with Article L. 225–100–III of the French Commercial Code, the granting of exceptional compensation must be approved at the annual Shareholders' Meeting.

- **Benefits in kind:** the Chief Executive Officer receives and uses a company car and is covered under Group healthcare and insurance plans for SUEZ employees.

- **Compensation related to attending Board and Committee meetings (formerly "Directors' fees"):** the Chief Executive Officer does not receive this type of compensation.

The weighting of the fixed, annual variable and long-term variable elements (excluding exceptional compensation) in the total compensation of the Chief Executive Officer is as follows:



(a) Valuation at the date of allocation.

Elements related to the termination of the term of office or subsequent to the term of office of the Chief Executive Officer

- **Severance pay:** it may be granted taking into account the Chief Executive Officer's personal situation on the date of taking up office.
As such, the Board of Directors, having taken note of the termination of the employment contract of Bertrand Camus and, consequently, the loss of existing contractual and legal arrangements in this regard in the event of redundancy, decided, at its meeting of February 26, 2019, to grant compensation to Bertrand Camus in the event of forced departure from the position of Chief Executive Officer (in particular following dismissal or resignation linked to a change of control or strategy of the Company).

  No compensation would be payable in the following cases:
  - if the departure occurs less than two years after the start date of the Chief Executive Officer's term of office or in the event of resignation, unless the departure follows a change of control of the Company or a change of strategy,
  - in the event of a change of duties within the SUEZ Group,
  - if the departure, regardless of its form, is a consequence of gross negligence or misconduct by the Chief Executive Officer,
  - if the Chief Executive Officer has the opportunity to claim retirement benefits as of the date of departure,
  - if the age limit for exercising the office of Chief Executive Officer has been reached, or
  - in the event of death.

  The amount of severance pay is capped at two years of annual fixed and variable compensation. The variable compensation to be taken into account when calculating severance pay will correspond to the average of the previous two annual variable compensation amounts actually paid to the Chief Executive Officer.

  Severance pay may also only be paid after the Board of Directors has acknowledged the achievement of the performance conditions, assessed on the date the Chief Executive Officer's term of office ends. These performance conditions correspond to the levels of achievement of the quantifiable performance criteria set by the Board of Directors at the beginning of each year for the calculation of the Chief Executive Officer's annual variable compensation.

  As a result, if the average amount obtained by the Chief Executive Officer in accordance with quantifiable criteria for the three years prior to departure is greater than or equal to the target amount of the annual variable compensation, then 100% of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average between 90% and 100% (excluding) of the target amount for the three years prior to departure, 70% of the amount of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average less than 90% (excluding) of the target amount for the three years prior to departure, no severance pay will be payable to the Chief Executive Officer. If the Chief Executive Officer leaves before the end of the third fiscal year, then fulfillment of the performance condition will be assessed on one or two years only, depending on how long the Chief Executive Officer remained in the position.

  Commitments made to the Chief Executive Officer for severance pay were approved by the SUEZ Shareholders' Meeting of May 14, 2019 under a special resolution.

- **Non-compete commitment:** it may be implemented in respect of the Chief Executive Officer in order to protect the legitimate interests of the Company, given the duties exercised by the Chief Executive Officer and the strategic, confidential information to which he or she has access in this context.
At its meeting of February 26, 2019, the Board of Directors therefore decided, in return for a commitment from Bertrand Camus not to exercise, directly or indirectly, any activity that competes with that of the Company or SUEZ Group companies for a period of two years from the end of his term of office as Chief Executive Officer, irrespective of the reason for the cessation of his duties, to grant him a payment of an amount equal to one year's compensation (fixed and variable

amounts, the variable compensation considered for the calculation of this payment being the average of the last two annual variable compensation amounts actually paid to the Chief Executive Officer), paid in the form of 24 equal, successive monthly installments.

In accordance with the AFEP-MEDEF Code, the total severance pay and indemnity due under a non-compete commitment may under no circumstances exceed two years' compensation (fixed and variable compensation, with the variable compensation based on the average of the two last annual variable compensations paid to the Chief Executive Officer). Accordingly, if the Board of Directors was to decide to implement the non-compete commitment, the amount of the severance pay would be capped at one year's compensation.

The indemnity due under a non-compete commitment will not be paid, under any circumstances, if the Chief Executive Officer retires or is over 65 years old at the end of his term as Chief Executive Officer.

In addition, the Board of Directors will have the possibility of renouncing implementation of this non-compete commitment on the Chief Executive Officer's departure, in which case no indemnity will be due.

These non-compete compensation commitments made for the Chief Executive Officer were approved by the SUEZ Shareholders' Meeting of May 14, 2019.

- **Retirement plan:** the Chief Executive Officer may be entitled to a Pension Plan established by the Company.
  Since 2006, Bertrand Camus has benefited, under his employment contract, from a Group defined-benefit retirement plan, under Article L. 137–11 of the French Social Security Code, applicable to Company employees, which had allowed him to accrue potential entitlements and which was maintained if the interested party ends their career at the Company. The termination of Bertrand Camus's employment contract on May 14, 2019 resulted in the permanent waiving of the benefit of the entitlements accrued under this plan.

  The Board of Directors had examined the cost of maintaining the benefit of this plan for the Chief Executive Officer. On completion of the review, the Board had felt that setting up another optional defined contribution Pension Plan was in the Company's interests since the cost of this plan was significantly lower than the current defined benefits scheme, while remaining competitive for the beneficiary.

  Consequently, the Board of Directors decided at its meeting of February 26, 2019 that the Chief Executive Officer would be entitled to optional membership of this defined contribution Pension Plan set up by the Company, which is governed by the provisions of Article 82 of the French General Tax Code and provides the beneficiary with the guarantee of an additional retirement income benefit in the form of an annuity or a cash sum when he claims his pension entitlement. In this regard, the Company will pay an annual amount, linked to the Group's performance, corresponding to 30% of the fixed compensation and the annual variable compensation paid to the Chief Executive Officer, on the understanding that this amount will be paid in cash by the Company. Half will be paid to the insurer responsible for managing the plan and half to the Chief Executive Officer, given the immediate taxation on payments made into this new plan.

  Although the payments made by the Company under the defined contribution Pension Plan do not guarantee the Chief Executive Officer a level of annuity equivalent to the amount he would have received had he stayed in the defined benefit plan (subject to serving out the remainder of his career with the Company), this change allows the Chief Executive Officer to accrue certain rights and the Company to make an estimated saving of 47% (comparing the cost of the two plans until the age at which the Chief Executive Officer may claim retirement benefits).

  This commitment made for the Chief Executive Officer for this defined benefit retirement plan was approved by the Shareholders' Meeting of May 14, 2019. Additional information regarding this commitment is provided in section 13.1.2.1.

13.1.1.4 Compensation policy for Directors

Director compensation (except for the Chairman of the Board of Directors, the Chief Executive Officer, Directors representing employees and the Director representing employee shareholders) only consists of compensation related to their attendance at Board of Directors and Committee meetings, where applicable (formerly called "Directors' fees").

The maximum annual amount for this compensation set by the Combined Shareholders' Meeting of May 22, 2014 was EUR 700,000.

Since fiscal year 2014, this compensation has been allocated according to the following rules, with the understanding that a reduction, based on the attendance rate, of the amount of this compensation is applied in the event that the amount has been exceeded, and that the Board may decide to share the unpaid balance, depending on the attendance rate of each Director, if the amount has not been used in full:

- a fixed annual portion of EUR 15,000 per Director;
- a variable portion of EUR 2,000 per meeting for each Director;
- a variable portion of:
  - EUR 2,000 per meeting for each of the members of the Board of Directors' committees,
  - EUR 4,000 per meeting of the Committee that they chair for the Chairman of the Appointments, Compensation and Governance Committee, the Strategy Committee and the CSR, Innovation, Ethics, Water and Sustainable Planet Committee,
  - EUR 6,000 per meeting of the Audit and Financial Statements Committee for the Chairman of the Committee.

The variable portion for attending a meeting of the Board of Directors or of a Committee is reduced to EUR 1,000 if attendance is by means of telecommunication (phone, video conference), except in exceptional circumstances.

These distribution rules mean that the variable portion related to the Directors' attendance at Board and Committee meetings is greater than the annual fixed portion allocated thereto, in compliance with the AFEP-MEDEF Code. The Directors' compensation policy, which has remained unchanged, will be submitted to the Shareholders' Meeting on May 12, 2020 under Resolution 19.

13.1.2 Compensation of the Chief Executive Officer, Chairman and Directors for 2019

13.1.2.1 Compensation of the Chief Executive Officer for 2019

The tables below summarize the compensation of the Chief Executive Officer, the Company's sole Executive Corporate Officer, according to the model defined by the AFEP-MEDEF Code and AMF recommendations.

As a reminder, in 2019, two Chief Executive Officers worked successively within the Company-Jean-Louis Chaussade from January 1 to May 14, 2019, and Bertrand Camus from May 14 to December 31, 2019. The compensation described below is thus from two different compensation policies that applied to these people over the periods considered and were approved during the Shareholders' Meeting of May 14, 2019 and described in section 15 of the Company's 2018 Reference Document.

2019 Compensation for Jean-Louis Chaussade

SUMMARY TABLE OF COMPENSATION, OPTIONS AND SHARES ALLOCATED TO THE CHIEF EXECUTIVE OFFICER – GROSS AMOUNTS (IN EUROS)

Jean-Louis Chaussade, Chief Executive Officer from January 1 to May 14, 2019	Fiscal year 2019	Fiscal year 2018	Fiscal year 2017
Compensation due for the year (see breakdown below)	479,425	1,426,788	1,301,471
Valuation of long-term incentive plans allocated during the year (according to IAS 19 revised)	–	–	166,386
Valuation of options or performance shares allocated during the year	–	–	–
Valuation of exceptional compensation allocated during the year (according to IAS 19 revised)	–	1,478,826 [a]	–
Total	**479,425**	**2,905,614**	**1,467,857**

(a) The amount that will be effectively paid in 2020 for this exceptional compensation amounts to EUR 1,036,383, after the Board of Directors assesses performance conditions.

SUMMARY TABLE OF THE CHIEF EXECUTIVE OFFICER'S COMPENSATION (IN EUROS)

	Amounts in fiscal year 2019 [a]		Amounts in fiscal year 2018		Amounts in fiscal year 2017	
Jean-Louis Chaussade, Chief Executive Officer	due	paid	due	paid	due	paid
Fixed compensation [b]	278,226	278,226	750,000	750,000	750,000	750,000
Variable compensation	196,956 [c]	666,415 [d]	666,415	541,098 [d]	541,098	637,455 [d]
Long-term variable compensation	–	0 [e]	–	351,000 [f]	–	750,000 [g]
Exceptional compensation	–	–	1,036,383 [h]	–	–	–
Benefits in kind	4,243	4,243	10,373	10,373	10,373	10,373
Total	**479,425**	**948,884**	**2,463,171**	**1,652,471**	**1,301,471**	**2,147,828**

(a) For the period from January 1 to May 14, 2019, the date Jean-Louis Chaussade's term of office ended.
(b) Including contributions under the general social security retirement plan (CNAV) and under the mandatory supplementary pension plans (AGIRC and ARRCO).
(c) Subject to approval by the Shareholders' Meeting of May 12, 2020.
(d) Variable compensation paid corresponds to the variable compensation in respect of year n-1.
(e) No compensation was paid to the Chief Executive Officer as long-term variable compensation for the 2016 fiscal year.
(f) The payment of EUR 351,000 in 2018 corresponds to long-term variable compensation granted for the 2015 fiscal year.
(g) The payment of EUR 750,000 in 2017 corresponds to long-term variable compensation granted for the 2014 fiscal year.
(h) The payment of this exceptional compensation, which was approved by the Shareholders' Meeting of May 14, 2019, will take place in 2020.

Jean-Louis Chaussade's gross fixed compensation for the period from January 1 to May 14, 2019 totaled EUR 278,226 (corresponding to annual gross fixed compensation of EUR 750,000, unchanged since 2009). Since August 1, 2014, the amount of the annuities paid to Jean-Louis Chaussade under the general social security retirement plan of the National Pension Fund (CNAV) and under the mandatory supplementary pension plans ARRCO and AGIRC has been deducted from the amount paid by the Company, and the total fixed compensation actually paid by SUEZ to Jean-Louis Chaussade in 2019 was EUR 237,141. The amount paid for his mandatory pension plans for the period from January 1 to May 14 was EUR 41,085.

In addition to this fixed compensation, variable compensation ranging from 0% to 145% of the total fixed amount is paid, with a target if 100% of the set objectives are achieved corresponding to the allocation of a variable portion equal to 80% of the fixed compensation.

This variable amount was defined according to budget-based quantifiable criteria (for internal criteria), for 75%, and qualitative criteria for 25%. The details of these criteria, for which the expected achievement level was pre-established by the Board of Directors at its meeting of February 26, 2019 on the recommendation of the Compensation Committee, are shown below.

	Weighting	Scope of evaluation	Level of achievement	Amount *(in EUR)*
EBIT	20%	0 to 120%	100.6%	122,925
Free Cash Flow	20%	0 to 120%	100.6%	122,925
ROCE	10%	0 to 120%	100.8%	61,950
Total Shareholder Return	25%	0 to 120%	<80%	0
Total quantifiable criteria	**75%**		**93.7%**	**307,800**
Total qualitative criteria [(a)]	**25%**	**0 to 120%**	**112%**	**223,125**
Total variable amount	**100%**		**97.7%**	**530,925**
Total variable amount after *pro rata* calculation [(b)]				**196,956**

(a) The qualitative criteria related to Health and Safety results and how successful the managerial transition was.
(b) Prorated calculation until the end of Chief Executive Officer Jean-Louis Chaussade's term of office, May 14, 2019.

As a reminder, the 2018 variable amount, paid in 2019, was EUR 666,415.

In addition to the fixed and variable compensation mentioned above, 2019 benefits in kind totaled EUR 4,243, corresponding to the provision of a company car.

Long-term variable compensation

During its meeting on February 26, 2019, the Board of Directors voted not to grant long-term variable compensation to Jean-Louis Chaussade for 2019, as his term of office as Chief Executive Officer was ending on May 14, 2019.

Furthermore, Jean-Louis Chaussade was not paid any amount in 2019 for the long-term variable compensation plan set up by the Board of Directors in 2016. As a reminder, the amount paid in respect of this plan, capped at EUR 750,000, was subject to two cumulative performance conditions with a 10% increase or decrease on the total amount depending on the fulfillment of a non-financial criterion relating to the proportion of women executives:

Performance conditions	Level of achievement	Award level
The Group's cumulative EBIT for fiscal years 2016 to 2018 inclusive	99.2%	47.5%
Change in TSR for SUEZ compared to average TSR for companies in the DJ Euro Stoxx Utilities Index from January 1, 2016 to December 31, 2018	<90%	0%
Proportion of women in management	100%	–
Total		**0%**

Other benefits

RETIREMENT AND HEALTH CARE COVERAGE

No specific supplementary retirement plan was established for Jean-Louis Chaussade, Chief Executive Officer until May 14, 2019. Mr. Chaussade thus participated in the supplementary Group retirement plan, with defined contributions and defined benefits, applicable to employees of the Company and some of its subsidiaries.

Jean-Louis Chaussade had decided to claim benefits under all of his pension plans as of August 1, 2014, including the defined contribution and defined benefit pension plans of the SUEZ Group. He had, however, decided to waive any pension payments under these supplementary plans until his duties as Chief Executive Officer come to an end on May 14, 2019.

The annual pension resulting from Group supplementary retirement plans to be paid to Jean-Louis Chaussade (since he is no longer Chief Executive Officer) totals EUR 282,546, or 21.9% of his 2019 annualized compensation (including fixed and variable compensation payable by the Company).

Jean-Louis Chaussade also received benefits under the Company's current mandatory group health care plans.

EMPLOYMENT CONTRACT AND SEVERANCE PAY

	Employment contract		Supplementary retirement plan		Compensation or benefits due or that may become due pursuant to termination or a change in duties		Compensation due under a non-compete clause	
Corporate Officers	Yes	No	Yes	No	Yes	No	Yes	No
Jean-Louis Chaussade **Chief Executive Officer**		X		X		X		X
Start of term of office: 07/23/2008 **End of term of office:** 05/14/2019								

Shareholder vote on 2019 compensation for Jean-Louis Chaussade, Chief Executive Officer until May 14, 2019

In accordance with Article L. 225–100-II of the French Commercial Code, on May 12, 2020, the Shareholders' Meeting will be required to vote on the elements of compensation paid in 2019 or awarded for 2019 to Jean-Louis Chaussade, Chief Executive Officer until May 14, 2019.

These elements have been paid or awarded in accordance with the compensation policy approved by 95.06% of the Shareholders' Meeting of May 14, 2019.

The Shareholders' Meeting of May 12, 2020 (Resolution 14) is asked to vote on the following elements of compensation paid during the 2019 fiscal year or awarded for the 2019 fiscal year to Jean-Louis Chaussade, Chief Executive Officer:

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Fixed compensation	EUR 278,226	EUR 278,226	This compensation corresponds to fixed annual compensation of EUR 750,000, unchanged since 2009, for the period from January 1 to May 14, 2019, during which time Jean-Louis Chaussade was Chief Executive Officer. Since August 1, 2014, the retirement benefits claim date, the amount of annuities paid to Jean-Louis Chaussade under the mandatory Pension Plan (EUR 41,085 for the period from January 1 to May 14, 2019) has been deducted from the amount of the fixed compensation paid by the Company.
Annual variable compensation	EUR 666,415	EUR 196,956	The amount of EUR 666,415 relates to annual variable compensation awarded for 2018 paid in 2019. The payment of this amount was approved during the Shareholders' Meeting on May 14, 2019. The amount of EUR 196,956 corresponds to the 2019 annual variable compensation of Jean-Louis Chaussade (amount calculated on a *pro rata* basis for the period he worked as Chief Executive Officer from January 1 to May 14, 2019), as approved by the Board of Directors at its meeting on February 25, 2020, upon the recommendation of the Appointments, Compensation and Governance Committee. This compensation accounts for 70.8% of the fixed portion of his compensation. Note that Jean-Louis Chaussade was not present when the Board of Directors decided on his compensation. Jean-Louis Chaussade's variable compensation may represent between 0% and 145% of his fixed compensation and has been determined on the basis of: ► quantifiable criteria previously set by the Board of Directors in February 2019, based on the 2019 budget. These criteria account for 75% of the overall weighting of the variable portion and are related to EBIT (20%), free cash flow (20%), ROCE (10%), and TSR (25%); and ► qualitative criteria, which account for 25% of the overall weighting of the variable portion and relate to Health and Safety results and how successful the managerial transition was. The payment of this annual variable compensation is subject to approval at the Shareholders' Meeting on May 12, 2020. It is not possible for the Company to request that this variable compensation be returned.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Long-term variable compensation	EUR 0	None	In 2016, the Board of Directors decided to award Jean-Louis Chaussade long-term variable compensation for fiscal year 2016, of a maximum amount of EUR 750,000, or 100% of his annual fixed compensation, and providing, as the case may be, for a cash payment in 2019, subject to meeting two cumulative performance conditions: ► an internal performance condition based on the Group's cumulative EBIT from 2016 to 2018; ► a market performance condition based on the level of SUEZ's Total Shareholder Return (TSR) compared to the average TSR of the companies comprising the DJ Euro Stoxx Utilities index over the period from January 1, 2016 to December 31, 2018. As these two conditions were achieved respectively, at 99.2% for the internal condition and less than 90% for the external condition, the Chief Executive Officer was not paid any amount of this long-term variable compensation. No long-term variable compensation was awarded to Jean-Louis Chaussade for 2019 either.
Exceptional compensation	N/A	N/A	As a reminder, the Board of Directors voted, at its meeting on February 28, 2018, to award Jean-Louis Chaussade exceptional compensation linked to the acquisition of GE Water & Process Technologies, of a target amount equal to twice his fixed compensation, *i.e.* EUR 1,500,000, which may be increased to a maximum of EUR 1,650,000 if the objectives set are exceeded, subject to the achievement of the following performance conditions, assessed over an 18-month period between October 1, 2017 and March 31, 2019: ► a performance condition concerning quantifiable criteria (80% of the total weighting) based on the organic growth of the new WTS business unit (20%), its EBITDA (32%), and its Operating Cash Flow (28%); ► a performance condition relating to qualitative criteria, accounting for 20% of the overall weighting, linked to the integration process (change management, consistency within the teams, growth and development of the Group's revenue with industrial clients, and acceleration of the Group's transformation thanks to the integration of GE Water). After the Board of Directors reviewed the performance conditions accompanying this exceptional compensation, the amount of the compensation came out to EUR 1,036,383. The Shareholders' Meeting of May 14, 2019 approved the awarding of this exceptional compensation, which will be paid in 2020. It is not possible for the Company to request that the exceptional compensation be returned.
Stock options, performance shares or any other long-term benefit (warrants, etc.)	N/A	N/A	No grants were allocated in 2019.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Compensation due to a Director's term of office	EUR 0	EUR 0	Jean-Louis Chaussade was not receiving compensation for attending Board or Committee meetings.
Benefits of any kind	EUR 6,444	EUR 6,444	The Chief Executive Officer uses a company car and is covered by the Group healthcare plan for Company employees.
Severance pay	N/A	N/A	Jean-Louis Chaussade received no severance pay in the event of termination of his office.
Supplementary retirement	No amount paid	No amount awarded	Jean-Louis Chaussade was covered by the Group's supplementary retirement plans applicable to SUEZ employees: a mandatory Group defined-contribution plan under Article L. 441-1 of the French Insurance Code and a supplementary variable Group defined-benefit retirement plan. Jean-Louis Chaussade decided to liquidate all of his retirement plans as of August 1, 2014, including the Group defined-contribution and defined-benefit retirement plans. He did, however, decide to waive any pension payments under these supplementary plans until his duties as Chief Executive Officer come to an end. The annual amount of the annuity resulting from SUEZ supplementary retirement plans to be paid to Jean-Louis Chaussade (since he is no longer Chief Executive Officer) is EUR 282,546, or 21.9% of his 2019 annualized compensation (including fixed and variable compensation payable by the Company).

2019 compensation for Bertrand Camus

SUMMARY TABLE OF COMPENSATION, OPTIONS AND SHARES ALLOCATED TO THE CHIEF EXECUTIVE OFFICER – GROSS AMOUNTS (IN EUROS)

Bertrand Camus, Chief Executive Officer starting on May 14, 2019	Fiscal year 2019
Compensation due for the year (see breakdown below)	1,280,449
Valuation of long-term incentive plans allocated during the year (according to IAS 19 revised)	338,398
Valuation of options or performance shares allocated during the year	–
Total	**1,618,847**

SUMMARY TABLE OF THE CHIEF EXECUTIVE OFFICER'S COMPENSATION (IN EUROS)

	Amounts in fiscal year 2019 [(a)]	
Bertrand Camus, Chief Executive Officer starting on May 14, 2019	due	paid
Fixed compensation	471,774	471,774
Variable compensation	510,283 [(b)]	N/A
Long-term variable compensation	–	–
Exceptional compensation	–	–
Retirement benefits	294,617 [(b)]	–
Benefits in kind	3,775	3,775
Total	**1,280,449**	**475,549**

(a) Amounts calculated on a *pro rata* basis for the period from May 14 to December 31, 2019
(b) Subject to approval by the Shareholders' Meeting of May 12, 2020.

Gross compensation for Bertrand Camus in 2019 totaled EUR 471,774 (corresponding to annual gross compensation of EUR 750,000, unchanged since 2009).

In addition to this fixed compensation, variable compensation ranging from 0% to 150% of the total fixed amount is paid, with a target if the set objectives are achieved, corresponding to the allocation of a variable portion equal to 100% of the fixed compensation.

This variable amount was defined according to budget-based quantifiable criteria (for internal criteria), for 75%, and qualitative criteria for 25%. The details of these criteria, for which the expected achievement level was pre-established by the Board of Directors at its meeting of February 26, 2019 on the recommendation of the Compensation Committee, are shown below.

	Weighting	Scope of evaluation	Level of achievement	Amount *(in EUR)*
EBIT	20%	0 to 120%	100.6%	152,250
Free Cash Flow	20%	0 to 120%	100.6%	152,250
Revenues	10%	0 to 120%	101.0%	76,875
Total Shareholder Return	15%	0 to 120%	94.0%	67,500
Health/Safety results	10%	0 to 120%	113.25%	99,844
Total quantifiable criteria	**75%**		**99.6%**	**548,719**
Total qualitative criteria [a]	**25%**	**0 to 120%**	**116%**	**262,500**
Total variable amount	**100%**		**103.3%**	**811,219**
Total variable amount after *pro rata* calculation [b]				**510,283**

(a) The qualitative criteria pertained to the managerial transition, the strategy and business development proposals to the Board of Directors as well as management of the strategic plan roll out.
(b) Amount calculated on a *pro rata* basis since Bertrand Camus began his term of office as Chief Executive Officer on May 14, 2019.

In addition to the fixed and variable compensation mentioned above, 2019 benefits in kind totaled EUR 3,775, corresponding to the provision of a company car.

Long-term variable compensation

Upon the recommendation of the Appointments, Compensation and Governance Committee, during its meeting on October 29, 2019, the Board of Directors granted Bertrand Camus long-term variable compensation for 2019.

This long-term variable compensation took the form of granting performance units. Each performance unit grants an entitlement to cash compensation at the end of the plan in 2022. It is indexed on the SUEZ share price and subject to achieving performance conditions from 2019 to 2021 as well as meeting service conditions for three years.

The Board of Directors therefore granted a target number of 38,750 performance units, corresponding to an equivalent of 70% of the Chief Executive Officer's annual fixed compensation (based on SUEZ's share price at the time of the award), which can be increased to a maximum of 77,500 performance units if the Group outperforms.

The number of performance units the Chief Executive Officer will vest will depend on how well the Group meets the following performance conditions, which will each count for one third of the performance units awarded. These internal performance conditions are completely aligned with the 2021 goals announced during the presentation of the "Shaping SUEZ 2030" strategic plan:

- an internal performance condition based on Group recurring earnings per share as they appear in SUEZ's Consolidated Financial Statements as of December 31, 2021;
- an internal performance condition relating to the Group's recurring free cash flow as it appears in SUEZ's Consolidated Financial Statements as of December 31, 2021;
- an external performance condition based on the change in SUEZ's TSR (Total Shareholder Return) compared to the change in the Euro Stoxx Utilities index over the period from January 1, 2019 to December 31, 2021.

For each of these performance conditions, the Board of Directors reviewed the payment scale for the performance units and decided that if the Group performs under the goals set for the internal conditions or the index for the external condition, no payment would be made for that condition. The Board of Directors wanted to make the performance conditions more demanding while providing a better reward for outperformance.

Additionally, the number of performance units vested by the Chief Executive Officer could be reduced or increased by 10% depending on management's feminisation level as of December 31, 2021. However, the number of performance units acquired cannot under any circumstances exceed the maximum number of performance units referred to above.

The Board of Directors also voted to combine the Chief Executive Officer's long-term variable compensation with an obligation to reinvest 25% of the net amount that would be effectively received in 2022 in shares, until the number of shares held by the Chief Executive Officer equals two times his fixed annual compensation.

Other benefits

PENSIONS

Bertrand Camus, Chief Executive Officer since May 14, 2019, is covered under an optional defined contribution pension scheme set up by the Company, governed by the provisions of Article 82 of the French General Tax Code (Code Général des Impôts), which guarantees the beneficiary an additional retirement pension or capital when he or she asserts his or her retirement rights.

The Company pays, based on the Group's performance, an annual amount corresponding to 30% of the fixed compensation and the annual variable compensation paid to the Chief Executive Officer, it being understood that half of this amount is paid in cash by the Company to the insurer in charge of managing the plan and the other half to the Chief Executive Officer, taking into account the tax treatment at the start of this new plan.

When Bertrand Camus's employment contract was terminated, it resulted in him permanently waiving the rights accrued under the Group defined-benefit pension scheme, on the understanding that, assuming Bertrand Camus had continued to be a member of this plan until he was 65 years old, and based on an average annual compensation corresponding to the sum of his fixed compensation and the target annual variable compensation, the amount of retirement income he could have received would have been around 34% of his annual compensation.

For compensation received in 2019, and subject to approval by the Shareholders' Meeting of May 12, 2020, the Company will pay EUR 294,617 in 2020. Half of the amount (EUR 147,308.50) will be paid to the insurer in charge of managing the Pension Plan and the other half to the Chief Executive Officer, considering the taxation at the beginning of the plan.

The Chief Executive Officer's Pension Plan, which was set up when he was appointed in accordance with the compensation policy approved by the Shareholders' Meeting of May 14, 2019, includes the following characteristics:

- it is a defined-contribution retirement plan governed by the provisions of Article 82 of the French General Tax Code;
- the Company pays, based on the Group's performance, an annual amount corresponding to 30% of the fixed compensation and the annual variable compensation paid to the Chief Executive Officer, it being understood that half of this amount is paid in cash by the Company to the insurer in charge of managing the plan and the other half to the Chief Executive Officer, taking into account the tax treatment at the start of this new plan;
- the plan available to the Chief Executive Officer is also available to other members of the Executive Committee;
- rights are acquired annually as payments are made by the Company (the beneficiary can make voluntary supplementary payments and there is no payment cap in this plan);
- plan payments for compensation due in 2019 will generate an estimated EUR 7,400 in gross annual retirement income. In addition, assuming Bertrand Camus continues to be a beneficiary of this plan until he is 65 years old, and based on an average annual compensation corresponding to the sum of his fixed compensation and target annual compensation, the amount of retirement income he could receive when claiming his retirement benefits would be around 8% of his annual compensation.

HEALTHCARE AND INSURANCE COVERAGE

Bertrand Camus continues to be covered under the Group health care and insurance plans applicable to SUEZ employees. For the period from May 14 to December 31, 2019, the contributions paid by the Company totaled EUR 3,377.

EMPLOYMENT CONTRACT AND SEVERANCE PAY

	Employment contract		Supplementary retirement plan		Compensation or benefits due or that may become due pursuant to termination or a change in duties		Compensation due under a non-compete clause	
Corporate Officers	Yes	No	Yes	No	Yes	No	Yes	No
Bertrand Camus **Chief Executive Officer**		X	X		X		X	
Start of term of office: 05/14/2019 **Date of the end of the Chief Executive Officer's term of office:** Shareholders' meeting 2023								

Detailed information on the terminated employment contract, severance pay and non-compete compensation are shown in section 13.1.1.3 of this chapter and are also in the table below, in the section entitled "shareholders vote on the 2019 compensation of Bertrand Camus, Chief Executive Officer since May 14, 2019".

Shareholders vote on the 2019 compensation of Bertrand Camus, Chief Executive Officer since May 14, 2019

In accordance with Article L. 225–100-II of the French Commercial Code, on May 12, 2020, the Shareholders' Meeting will be required to vote on the elements of compensation paid in 2019 or awarded for 2019 to Bertrand Camus, Chief Executive Officer since May 14, 2019.

These elements have been paid or awarded in accordance with the compensation policy approved by 80.70% of the Shareholders' Meeting of May 14, 2019.

The Shareholders' Meeting of May 12, 2020 (Resolution 15) is asked to vote on the following elements of compensation due or awarded for 2019 to Bertrand Camus, Chief Executive Officer for the period from May 14, to December 31, 2019:

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Fixed compensation	EUR 471,774	EUR 471,774	This is gross fixed compensation for 2019 calculated on a *pro rata* basis for the period from May 14 to December 31, 2019. On an annual basis, the Chief Executive Officer's gross fixed compensation is EUR 750,000, unchanged since 2009.
Annual variable compensation	N/A	EUR 510,283	During its meeting on February 25, 2020, upon the Appointments, Compensation and Governance Committee's recommendation, the Board of Directors approved Bertrand Camus's annual variable compensation for 2019, which came out to EUR 510,283 (amount calculated on a *pro rata* basis for the period he was Chief Executive Officer from May 14 to December 31, 2019), *i.e.* 108.2% of the fixed portion of his compensation. Note that Bertrand Camus was not present when the Board of Directors decided on his compensation. Bertrand Camus's variable compensation may represent between 0% and 150% of his fixed compensation and has been determined based on: ► quantifiable criteria previously set by the Board of Directors in February 2019, based on the 2019 budget. These criteria represent 75% of the overall weighting of the variable compensation and are related to EBIT (20%), free cash flow (20%), revenue (10%), TSR (15%) and Health and Safety results (10%); and ► qualitative criteria, which accounts for 25% of the overall weighting of the variable compensation and are related to managerial transition, strategy and business development proposals to the Board of Directors as well as management of the strategic plan roll out. The payment of this annual variable compensation is subject to approval at the Shareholders' Meeting on May 12, 2020. It is not possible for the Company to request that this variable compensation be returned.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Long-term variable compensation	**EUR 0**	**EUR 338,398** (Carrying amount of performance units awarded for fiscal year 2019)	The Board of Directors voted to grant long-term variable compensation for 2019 to Bertrand Camus. This long-term variable compensation took the form of granting performance units. Each performance unit grants an entitlement to cash compensation at the end of the plan in 2022. It is indexed on the SUEZ share price and subject to achieving performance conditions from 2019 to 2021 as well as meeting service conditions for three years. As a result, the Board of Directors granted a target number of 38,750 performance units corresponding to an equivalent amount of 70% of the Chief Executive Officer's annual fixed compensation (based on SUEZ's share price on the award date), which can be increased to a maximum of 77,500 performance units if the Group outperforms. The number of performance units the Chief Executive Officer will vest will depend on how well the Group meets the following performance conditions, which will each count for one third of the performance units awarded. These internal performance conditions are completely aligned with the 2021 goals announced during the presentation of the "Shaping SUEZ 2030" strategic plan: ► an internal performance condition based on Group recurring earnings per share as they appear in SUEZ's Consolidated Financial Statements as of December 31, 2021; ► an internal performance condition relating to the Group's recurring free cash flow as it appears in SUEZ's Consolidated Financial Statements as of December 31, 2021; ► an external performance condition based on the change in SUEZ's TSR (Total Shareholder Return) compared to the change in the Euro Stoxx Utilities index over the period from January 1, 2019 to December 31, 2021. For each of these performance conditions, if the Group performs under the goals set for the internal conditions or the index for the external condition, no payment would be made for that condition. Additionally, the number of performance units vested by the Chief Executive Officer could be reduced or increased 10% depending on management's feminisation level as of December 31, 2021. However, the number of performance units acquired cannot under any circumstances exceed the maximum number of performance units referred to above. The Board of Directors also voted to combine the Chief Executive Officer's long-term variable compensation with an obligation to reinvest 25% of the net amount that would be effectively received in 2022 in shares, until the number of shares held by the Chief Executive Officer equals two times his fixed annual compensation. It is not possible for the Company to request that this variable compensation be returned. This long-term variable compensation is subject to the approval of the Shareholders' Meeting of May 12, 2020.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Exceptional compensation	N/A	N/A	The Chief Executive Officer was not awarded exceptional compensation in 2019.
Stock options, performance shares or any other long-term benefit (warrants, etc.)	N/A	N/A	No allocation was made to the Chief Executive Officer for fiscal year 2019.
Compensation due to a Director's term of office	N/A	N/A	The Chief Executive Officer did not receive compensation for attending Board of Directors or Committee meetings.
Benefits of any kind	EUR 7,152	EUR 7,152	Bertrand Camus has a company car. He is also still covered under the Group healthcare and insurance plans applicable to SUEZ employees.
Severance pay	No amount paid	N/A	Bertrand Camus will receive severance pay in the event of termination of his office. The Board of Directors, having noted the termination of Bertrand Camus's employment contract, and therefore the loss of the legal and contractual arrangements existing under his contract in the event of dismissal, decided, at its meeting on February 26, 2019, to award Bertrand Camus severance pay should he leave his office as Chief Executive Officer following a forced departure, particularly due to dismissal or resignation linked to a change in control of the Company or a change of its strategy. No severance pay would be due in the following cases: ► if the departure occurred less than two years after the start date of the Chief Executive Officer's term of office or in the event of resignation, except if the departure results from a change in the Company's control or a change of strategy; ► in the event of a change of duties within the SUEZ Group; ► if the departure, regardless of its form, is a consequence of gross negligence or misconduct by the Chief Executive Officer; ► if the Chief Executive Officer is eligible for retirement at the time of departure; ► if the age limit for exercising the office of Chief Executive Officer has been reached; or ► in the event of death. The amount of severance pay is capped at two years of annual fixed and variable compensation. The variable compensation to be taken into account when calculating severance pay will correspond to the average of the previous two annual variable compensation amounts actually paid to the Chief Executive Officer.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Severance pay			Severance pay may also only be paid after the Board of Directors has acknowledged the achievement of the performance conditions, assessed on the date the Chief Executive Officer's term of office ends. These performance conditions correspond to the rates of achievement of the quantifiable criteria set at the start of each fiscal year by the Board of Directors for the calculation of the Chief Executive Officer's annual variable compensation. As a result, if the average amount obtained by the Chief Executive Officer in accordance with quantifiable criteria for the three years prior to departure is greater than or equal to the target amount of the annual variable compensation, then 100% of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average between 90% and 100% (excluding) of the target amount for the three years prior to departure, 70% of the amount of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average less than 90% (excluding) of the target amount for the three years prior to departure, no severance pay will be payable to the Chief Executive Officer. If the Chief Executive Officer leaves before the end of the third fiscal year, then fulfillment of the performance condition will be assessed on one or two years only, depending on how long the Chief Executive Officer remained in the position. This severance pay was approved by the Shareholders' Meeting on May 14, 2019 under Resolution 15.
Compensation due under a non-compete clause	No amount paid	N/A	The Board of Directors decided, at its meeting on February 26, 2019 in exchange for a commitment by Bertrand Camus not to practice, for a period of two years from the end of his term of office as Chief Executive Officer, no matter why the term of office came to an end, either directly or indirectly, an activity that competes with the activities of the Company and the SUEZ Group's companies, to award him compensation equal to one year's compensation (fixed and variable compensation, with the variable compensation being based on the average of the two last annual variable compensations paid to the Chief Executive Officer), paid in 24 equal and successive monthly installments. In accordance with the AFEP-MEDEF Code, the total severance pay and indemnity due under a non-compete commitment may under no circumstances exceed two years' compensation (fixed and variable compensation, with the variable compensation based on the average of the two last annual variable compensations paid to the Chief Executive Officer). Accordingly, if the Board of Directors was to decide to implement the non-compete commitment, the amount of the severance pay would be capped at one year's compensation. The indemnity due under a non-compete commitment will not be paid, under any circumstances, if the Chief Executive Officer retires or is over 65 years old at the end of his term as Chief Executive Officer. In addition, the Board of Directors will have the possibility of renouncing implementation of this non-compete commitment on the Chief Executive Officer's departure, in which case no indemnity will be due. This compensation due under a non-compete clause was approved by the Shareholders' Meeting of May 14, 2019 under Resolution 15.

Elements of compensation submitted for voting	Amounts paid during the year	Amounts awarded for the year or carrying amount	Presentation
Supplementary retirement	No amount paid	EUR 294,617	Bertrand Camus is covered under a supplementary retirement plan. The Board of Directors decided at its meeting of February 26, 2019 that the Chief Executive Officer would be entitled to be covered under a defined-contribution Pension Plan set up by the Company, which is governed by the provisions of Article 82 of the French General Tax Code and provides the beneficiary with the guarantee of an additional retirement income benefit in the form of an annuity or a cash sum when he claims his pension entitlement. In this regard, the Company will pay an annual amount, linked to the Group's performance, corresponding to 30% of the fixed compensation and the annual variable compensation paid to the Chief Executive Officer, on the understanding that this amount will be paid in cash by the Company. Half will be paid to the insurer responsible for managing the plan and half to the Chief Executive Officer, given the immediate taxation on payments made into this new plan. The payment of EUR 294,617 under this plan is subject to approval at the Shareholders' Meeting on May 12, 2020. The Shareholders' Meeting of May 14, 2019 granted and approved this defined-contribution supplementary retirement plan under Resolution 16.

13.1.2.2 Compensation of the Chairman for 2019

Note that two Chairmen of the Board of Directors have succeeded one another in 2019 – Gérard Mestrallet for the period from January 1 to May 14, 2019 and Jean-Louis Chaussade for the period from May 14 to December 31, 2019.

A) SHAREHOLDER VOTE ON THE 2019 COMPENSATION FOR GÉRARD MESTRALLET, CHAIRMAN OF THE BOARD OF DIRECTORS

In accordance with Article L. 225–100-II of the French Commercial Code, on May 12, 2020, the Shareholders' Meeting will be required to vote on the elements of compensation paid in 2019 or awarded for 2019 to Gérard Mestrallet, Chairman of the Board of Directors until May 14, 2019. These elements have been paid or awarded in accordance with the compensation policy approved by 98.71% of the Shareholders' Meeting of May 14, 2019.

Gérard Mestrallet's compensation due to his term of office as Chairman of the Board of Directors for the period from January 1 to May 14, 2019 amounted to EUR 27,500 in 2019. It corresponded solely to compensation received for attending Board of Directors and Committee meetings (formerly referred to as "Directors' fees"). This element of compensation is subject to approval by the Shareholders' Meeting of May 12, 2020 under Resolution 12.

B) SHAREHOLDER VOTE ON THE 2019 COMPENSATION FOR JEAN-LOUIS CHAUSSADE, CHAIRMAN OF THE BOARD OF DIRECTORS

In accordance with Article L. 225–100–II of the French Commercial Code, on May 12, 2020, the Shareholders' Meeting will be required to vote on the elements of compensation paid in 2019 or awarded for 2019 to Jean-Louis Chaussade, Chairman of the Board of Directors since May 14, 2019.

These elements have been paid or awarded in accordance with the compensation policy approved by 95.74% of the Shareholders' Meeting of May 14, 2019.

Jean-Louis Chaussade's compensation due to his term of office as Chairman of the Board of Directors for the period from May 14 to December 31, 2019 amounted to EUR 157,258 in 2019. It corresponds to fixed compensation over an annual base of EUR 250,000 plus a company car-a benefit valued at EUR 7,195 for the same period.

This compensation is subject to approval by the Shareholders' Meeting of May 12, 2020 under Resolution 13.

13.1.2.3 Executive-to-employee pay ratios

In accordance with Article L. 225–37–3, I, paragraph 6 and 7 of the French Commercial Code, the table below shows the yearly change in compensation for each Corporate Officer over the past five years compared to the average compensation of Company employees and the Company's performance. This table also mentions the following executive-to-employee pay ratios for each Corporate Officer: the ratio between the level of pay for a Corporate Officer and the average pay of Company employees on a full-time equivalent basis (hereafter called "SUEZ Holding average executive-to-employee pay ratio") and the ratio between the Corporate Officer's pay and the median pay of Company employees on a full-time equivalent basis (hereafter called "SUEZ Holding median executive-to-employee pay ratio"). Additionally, in order to provide more representative information and in accordance with AFEP-MEDEF Code recommendations (January 2020 version, Article 26), the Company decided to publish SUEZ Holding average executive-to-employee pay ratios for SUEZ Group employees in

France (29,332 FTE employees) in 2019 (hereafter called SUEZ France average executive-to-employee pay ratios).

The ratios were calculated using the following method:

- Scope:
  - employees (excluding Corporate Officers) of SUEZ SA, the Group's publicly traded holding company, 140 employees in 2019 (hereafter called "SUEZ Holding"),
  - permanent contract or fixed-term contract employees,
  - expatriate employees are excluded,
  - only employees who work 12 months out of the year are counted in the averages and medians for the year in question;
- Elements of compensation taken into account for employees:
  - gross annual compensation paid during the year, including the value of benefits in kind. Potential severance pay, as well as amounts paid under long-term incentive plans (which are valued at the award date) are excluded, however,
  - gross amounts from applying the profit-sharing formula (no incentive agreement in place on the scope used), that employees have chosen to receive in cash or that they have opted to invest in employee savings plans offered by the Group. For year N, the amounts calculated are those regarding year N-1,
  - value of the possible long-term variable compensation granted for the year (IFRS value at the grant date),
  - for part-time employees, the average is calculated by using workforce expressed as Full-Time Equivalents (one employee at 80% whose compensation is EUR 40,000 counts for EUR 50,000 in the average);
- Elements of compensation taken into account for Corporate Officers:
  - fixed compensation paid during year N and variable compensation paid in year N for year N-1,
  - value of benefits in kind allocated for year N,
  - value of long-term compensation granted for year N (IFRS value on the grant date),
  - where applicable, compensation received during year N for a Director's term of office (formerly "Directors' fees").

Criteria for net income Group share and EBIT have been chosen to illustrate the Company's performance.

	2015	2016	2017	2018	2019
Gross change in net income – Group share	-2.3%	+3.1%	-28%	+13.4%	+5.1%
Gross change in EBIT	+10.1%	-7.2%	+0.2%	+10.2%	+5.4%
Change in average compensation of SUEZ Holding employees	–	+4.3%	+6.5%	-0.1%	-13.0% [a]
Change in the Chairman's compensation	–	+7.9%	-15.0%	-15.8%	+261.8% [b]
SUEZ Holding average chairman-to-employee pay ratio	0.6	0.6	0.5	0.4	1.7
SUEZ Holding median chairman-to-employee pay ratio	0.9	0.9	0.7	0.6	2.4
SUEZ France average chairman-to-employee pay ratio	1.8	1.9	1.6	1.3	4.6
Change in the Chief Executive Officer's compensation	–	+0.4%	-20.0%	-16.8% [c]	+35.4% [d]
SUEZ Holding average CEO-to-employee pay ratio	16.8	16.2	12.2	10.1	15.8
SUEZ Holding median CEO-to-employee pay ratio	24.3	24.6	18.3	14.9	21.9
SUEZ France average CEO-to-employee pay ratio	51.2	51	39.3	32	42.5

(a) This decrease is mainly related to certain executives leaving the Company.
(b) Corresponds to Directors' fees received by Gérard Mestrallet, Chairman of the Board until May 14, 2019, then fixed compensation paid to Jean-Louis Chaussade, Chairman of the Board starting on May 14, 2019.
(c) The 2018 compensation for Chief Executive Officer does not include long-term variable compensation, as the CEO waived this pay.
(d) Corresponds to the compensation paid to Jean-Louis Chaussade until May 14, 2019, the date his term of office as Chief Executive Officer ended. It also includes compensation paid to Bertrand Camus, Chief Executive Officer starting on May 14, 2019 (including the value of the long-term incentive plan set up in 2019). Since the Chief Executive Officer's fixed compensation has been unchanged since 2009, the change in ratios between 2018 and 2019 mainly came from the Chief Executive Officer waiving his long-term variable compensation for 2018.

13.1.2.4 Director compensation for 2019

For fiscal year 2019, 16 Directors received compensation.

The following table shows the compensation allocated to Directors, calculated in accordance with the above rules and approved by the Board of Directors at its meeting on February 25, 2020.

Board members	Compensation 2019 [(a)] *(in euros)*	Compensation 2018 [(a)] *(in euros)*
Gérard Mestrallet	53,894	53,055
Nicolas Bazire	46,133	65,619
Miriem Bensalah-Chaqroun	39,151	23,619
Valérie Bernis [(b)]	20,500	55,328
Franck Bruel [(c)]	30,381	11,555
Francesco Caltagirone	26,158	31,055
Martha Crawford [(d)]	16,394	N/A
Delphine Ernotte Cunci	67,381	49,328
Lorenz d'Este [(b)]	41,500	79,055
Isidro Fainé Casas	24,513	26,619
Judith Hartmann	41,381	37,386
Isabelle Kocher	38,141	29,386
Ines Kolmsee [(e)]	–	7,500
Anne Lauvergeon	77,566	99,328
Pierre Mongin	42,925	31,055
Guillaume Pepy	83,381	73,055
Brigitte Taittinger-Jouyet [(f)]	50,601	13,555
Jérôme Tolot [(e)]	–	13,500
Total	**700,000**	**700,000**

(a) Gross amounts before any mandatory fixed levies, social security contributions or withholding tax, as applicable. Compensation due for the second half of 2019 was paid in February 2020; compensation for the second half of 2018 was paid in February 2019.
(b) The terms of office of Valérie Bernis and Lorenz d'Este expired at the end of the Shareholders' Meeting on May 14, 2019.
(c) Franck Bruel was appointed as a Director by the Shareholders' Meeting of May 17, 2018.
(d) Martha Crawford was appointed as a Director by the Shareholders' Meeting of May 14, 2019.
(e) The terms of office of Ines Kolmsee and Jérôme Tolot expired on May 17, 2018.
(f) Brigitte Taittinger-Jouyet was appointed as a Director by the Shareholders' Meeting of May 17, 2018.

13.1.3 Compensation of Executive Committee members

In 2019, members of the Executive Committee (formerly called the Management Committee), including the Chief Executive Officer, received total gross compensation of EUR 9,252,263.

The table below specifies the annual fixed and variable amounts paid to Executive Committee members over the last three years (amounts in euros). It does not include the valuation of the long-term incentive plans to which they are entitled. There were 8 members of the Executive Committee from September 2016 to April 2017, 9 members from April 2017 to March 2018, 11 from March 2018 to May 2019, then 9 from May to July 2019 and 10 starting on July 2019.

Year of payment	Total fixed portion	Total variable portion	Total compensation
2017	3,793,191	3,080,503	6,873,694
2018	4,859,407	3,520,611	8,380,018
2019	**4,894,835**	**4,357,428**	**9,252,263**

The change in compensation between 2018 and 2019 is due to the increase in annual variable compensation paid to members of the Executive Committee for 2018 results, like the change in bonus paid to the Chief Executive Officer.

Added to the compensation described above is an amount corresponding to employee profit-sharing, which totaled EUR 54,478 paid to the entire Executive Committee in 2019 for fiscal year 2018. This amount was EUR 74,424 in 2018 for 2017. Lastly, no amount was paid to Executive Committee members for the long-term incentive plan granted in 2016 because performance conditions defined in that plan were not met (see section 13.1.4 of this chapter).

13.1.4 Long-term incentive plans

General allocation policy

The objective of long-term incentives is to involve certain categories of employees and Corporate Officers in the Company's future growth and value creation and to retain them and recognize their performance, as well as to align the interests of the Group's managers with those of shareholders.

The beneficiaries of this long-term incentive bonus are:

- executives and senior managers ("Top Executives"), including members of the Executive Committee as well as high-potential managers and experts ("A Beneficiaries"); and
- employees who demonstrate outstanding performance but do not fall within the above categories ("B Beneficiaries").

Long-term variable compensation granted to all beneficiaries is fully subject to meeting internal performance conditions (related to audited financial indicators made public by the Company and in line with forecasts, the strategy and/or the objectives published by the Company or in line with the medium-term budget), one external performance condition (related to stock market performance or the Company's Total Shareholder Return) and one non-financial performance condition *(e.g.* based on gender balance in management).

Pursuant to the Code of Conduct on the prevention of market abuse, the members of the Executive Committee, including the Chief Executive Officer, may not engage in trading in Company shares, including the sale of shares resulting from the exercise of stock options or the allocation of performance shares, if they are in possession of inside information, as well as during the following blackout periods:

- a period of 30 days prior to the publication of the Company's annual and interim results, until two days after their publication; and
- a period of 15 days prior to the publication of the Company's first and third-quarter results, until two days after their publication.

Long-term variable compensation plan awarded in 2019

Upon the Appointments, Compensation and Governance Committee's proposal, during its meeting on October 29, 2019, the Board of Directors voted to implement a new plan in 2019 under the "SUEZ 2030" strategic plan. This plan includes performance units (providing for a cash payment indexed on the change in share price) for all beneficiaries. The plan is fully subject to meeting performance conditions assessed over several fiscal years.

This plan includes nearly 1,700 beneficiaries who have been granted 1,746,851 performance units, which can be increased to 2,271,494 performance units if the objectives set for each of the performance conditions listed below are surpassed. This plan provides for a cash payment in 2022 provided that the following performance conditions are met:

- a performance condition related to recurring net income per share as of December 31, 2021 applies to one third of the target number of performance units awarded;
- a performance condition related to recurring free cash flow as of December 31, 2021 applies to one third of the target number of performance units awarded;
- a performance condition related to Total Shareholder Return compared to the average Total Shareholder Return of the companies making up the Euro Stoxx Utilities index over the period from January 1, 2019 to December 31, 2021 applies to one third of the target number of performance units awarded.

The number of performance units vested under the above-mentioned performance conditions can also be increased by 10%, remain unchanged or decrease by 10% depending on if or how well the Group meets a performance condition related to gender balance in management as of December 31, 2021.

Compared to previous plans set up, the Board of Directors made the trigger thresholds for paying incentive bonuses harder – no payment will be made for a performance condition if a target objective is not met – but in return, better compensation is offered if the Group outperforms. Furthermore, the performance conditions are assessed separately now rather than cumulatively.

Note that the target objective for internal conditions correspond to objectives that appear in the Group's medium-term plan and are in line with the objectives announced to the market.

The long-term incentive plan provides for the loss of entitlement to payment in the event of resignation or termination due to gross negligence or serious misconduct; payment is maintained in other cases of termination of employment (retirement, disability, death), with graduated amounts according to years of service.

The members of the Executive Committee are obliged to reinvest in SUEZ shares 15% of the net amount that will be received in 2022 in respect of performance units until the number of shares being held represents 100% of their annual fixed compensation. Regarding the Chief Executive Officer, the requirement to reinvest in SUEZ shares is 25% of the net amount that will be received in 2022 until the number of shares being held represents 200% of his or her annual fixed compensation.

Summary of long-term variable compensation paid in cash to the Chief Executive Officer as of December 31, 2019

A) FOR JEAN-LOUIS CHAUSSADE

Plan	Target Amount [a] *(in euros)*	Maximum amount *(in euros)*	Amount due *(in euros)*	Performance conditions
2017	390,000	750,000	0	The amount that can be paid in 2020 was subject to two cumulative performance conditions: ► the Group's cumulative EBIT for fiscal years 2017 to 2019 inclusive (Level of completion: 99.2%; Level of allocation: 47.5%); ► the change in TSR for SUEZ compared to the average TSR of companies in the DJ Euro Stoxx Utilities Index from January 1, 2017 to December 31, 2019 (Level of completion: < 90%; Level of allocation: 0%). As the target relating to the level of women representation in management at December 31, 2019 was met, the amount remained unchanged. The total award rate thus came to 0%.

(a) Corresponding to the achievement of objectives set in the Group's medium-term plan, applicable when the internal performance condition takes effect and when there is a change in SUEZ TSR that is equal to or greater than the TSR of the DJ Euro Stoxx Utilities Index.

B) FOR BERTRAND CAMUS

Plan	Target Number [a] *(in performance units)*	Maximum number *(in performance units)*	Number acquired *(in performance units)*	Performance conditions
2019	38,750	77,500	Not known	The number of performance units vested by the Chief Executive Officer in 2022 will depend on how successfully the Group achieves the three following performance conditions, which each apply for one third of the performance units awarded: ► an internal performance condition based on Group recurring earnings per share as they appear in SUEZ's Consolidated Financial Statements as of December 31, 2021; ► an internal performance condition, relating to the Group's recurring free cash flow as it appears in SUEZ's Consolidated Financial Statements as of December 31, 2021; ► an external performance condition based on the change in SUEZ's TSR (Total Shareholder Return) compared to the change in the Euro Stoxx Utilities index over the period from January 1, 2019 to December 31, 2021. This number of performance units may also be reduced or increased by 10% depending on the feminisation level in management at December 31, 2021.

(a) Corresponding to an amount equivalent to 70% of the annual fixed compensation of the Chief Executive Officer based on SUEZ's share price at the grant date.

Stock option plans

In accordance with the Company's long-term compensation policy, no stock option plans have been set up since December 2010.

Furthermore, at December 31, 2019, no stock options still exist. Information on past stock option plans is available in chapter 15 of the Company's 2018 Reference Document.

Stock option plans allocated to the Executive Corporate Officer in 2019

	Plan	Type of option	Valuation of stock options based on the method used for the Consolidated Financial Statements *(in euros)*	Number of options allocated during the fiscal year	Adjusted exercise price	Exercise period
Bertrand Camus, Chief Executive Officer	. No options were awarded to the Corporate Officer by the Company in fiscal year 2019.					
Jean-Louis Chaussade, Chief Executive Officer	No options were awarded to the Corporate Officer by the Company in fiscal year 2019.					

Stock option plans subscribed or exercised by the Executive Corporate Officer in 2019

	Plan	Number of options exercised during the fiscal year	Adjusted exercise price
Bertrand Camus, Chief Executive Officer starting on May 14, 2019	The Corporate Officer exercised no Company stock options during fiscal year 2019.		
Jean-Louis Chaussade, Chief Executive Officer until May 14, 2019	The Corporate Officer exercised no Company stock options during fiscal year 2019.		

Stock options granted to the first ten eligible non-corporate officer and options exercised by them

	Total number of options awarded/ shares subscribed or purchased	Purchase price	Plan
Options granted in 2019 by the Company or any company within the scope of option awards, to the 10 employees of the Company or any other company within this scope, who received the highest number of such options (aggregate information)	Not applicable – No stock options granted in 2019.		
Options held on the Company and the aforesaid companies exercised during fiscal year 2019 by the 10 employees of the issuer and these companies who purchased or subscribed to the highest number of such options (aggregate information)	Not applicable – No stock options exercised in 2019.		

Performance share plans

No performance share plans were awarded in 2019.

At December 31, 2019, there were 765,917 performance shares in circulation, representing 0.12% of the Company's share capital in the case of the acquisition of all of the performance shares allocated.

Status of performance conditions applicable to the performance share plans

	Applicable performance conditions	Level of achievement	Proportion of shares delivered relative to the initial allocation
Plan of July 25, 2018[a]	Cumulative Group EBIT for fiscal years 2018, 2019 and 2020	Not known	Not known
	Change in TSR for SUEZ compared to average TSR for companies in the DJ Euro Stoxx Utilities Index from January 1, 2018 to December 31, 2020	Not known	
	Degree of gender parity among management	Not known	

(a) The Chief Executive Officer in office on the award date is not a beneficiary of this performance share plan.

A summary of past performance share plans is shown in chapter 15 of the 2018 Reference Document.

Performance shares granted to the Executive Corporate Officer in 2019

	Plan	Number of shares granted during fiscal year	Value of shares based on the method used for the Consolidated Financial Statements *(in euros)*	Vesting date	Availability date	Performance conditions
Bertrand Camus, Chief Executive Officer	No performance shares granted to the Corporate Officer in 2019.					
Jean-Louis Chaussade, Chief Executive Officer	No performance shares granted to the Corporate Officer in 2019.					

Performance shares fully vested during 2019 for the Executive Corporate Officer

	Plan	Vesting date	Number of shares that became available	Vesting conditions
Bertrand Camus, Chief Executive Officer	No performance shares fully vested by the Corporate Officer in 2019.			
Jean-Louis Chaussade, Chief Executive Officer	No performance shares fully vested by the Corporate Officer in 2019.			

Performance shares that became available to the Executive Corporate Officer during the fiscal year

	Plan	Vesting date	Number of shares that became available	Vesting conditions
Bertrand Camus, Chief Executive Officer	No performance shares became available in 2019.			
Jean-Louis Chaussade, Chief Executive Officer	No performance shares became available in 2019.			

Performance shares granted to the first ten eligible non-corporate officers

	Total number of performance shares granted	Plan conditions
Performance shares granted by the Company in fiscal year 2019 to the ten non-corporate officer employees of the Group (aggregate information)	No performance shares were awarded in 2019.	

Summary and features of performance share plans in progress as of December 31, 2019

The summary of performance share plans launched in 2009, 2010, 2012 and 2013 is available in chapter 15 of the Company's 2018 Reference Document.

	2018 plan
Date of authorization by the Shareholders' Meeting	May 17, 2018
Date of Board of Directors' meeting	July 25, 2018
Maximum number of performance shares initially granted	777,944
Of which for the Corporate Officer	–
Number of beneficiaries	803
Vesting date of shares	
For French tax residents	September 30, 2021
For foreign tax residents	–
Date of transferability of shares	
For French tax residents	September 30, 2021
For foreign tax residents	–
Number of performance shares canceled or forfeited	12,027
Number of performance shares fully vested	–
Of which by the Corporate Officer	–
Performance shares outstanding as of December 31, 2019	765,917

13.2 Amounts provisioned by the Company and its subsidiaries for the payment of pensions, retirement benefits and other benefits to members of the Executive Committee

The total retirement obligations provisioned or recognized for the members of the Executive Committee in the Consolidated Financial Statements as of December 31, 2019, including tax on employer contributions, amounted to EUR 5.5 million (compared to EUR 22.1 million in 2018). This change is due to the cumulative effect of departures of Committee members as well as the closure of the defined benefit pension plan (art.39) (see section 19.2.2 of chapter 18.1 of this Universal Registration Document).

14 Functioning of governance and management bodies

14.1 Terms of office of members of the Board of Directors

The following table shows the dates of first appointment and the expiration dates of the terms of office of the Directors of the Company, in office as of December 31, 2019:

Name and title	Date of first appointment	Start date of current term of office	Term of office expiration date
Jean-Louis Chaussade, Chairman of the Board of Directors	December 5, 2007	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Bertrand Camus Chief Executive Officer	May 14, 2019	May 14, 2019	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022
Nicolas Bazire, Director	July 15, 2008	May 14, 2019	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022
Miriem Bensalah-Chaqroun, Director	April 28, 2016	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Franck Bruel, Director	May 17, 2018	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Francesco Caltagirone, Director	February 28, 2017	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Martha Crawford, Director	May 14, 2019	May 14, 2019	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022
Delphine Ernotte Cunci, Director	May 24, 2012	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Isidro Fainé Casas, Director	October 29, 2014	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Judith Hartmann, Director	July 28, 2015	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Isabelle Kocher, Director	February 7, 2012	May 14, 2019	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022
Anne Lauvergeon, Director	October 29, 2014	May 14, 2019	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022
Gérard Mestrallet, Director	December 5, 2007	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Pierre Mongin, Director	February 2, 2016	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Guillaume Pepy, Director	July 15, 2008	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Brigitte Taittinger-Jouyet, Director	May 17, 2018	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Agatta Constantini, Director representing employees[a]	December 12, 2014	December 12, 2018	December 11, 2022
Enric Xavier Amiguet i Rovira, Director representing employees[a]	February 11, 2015	February 11, 2019	February 10, 2023
Guillaume Thivolle, Director representing employee shareholders[b]	April 28, 2016	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019

(a) Directors representing employees appointed pursuant to Article L. 225-27-1 of the French Commercial Code and Article 10 of the Company bylaws.
(b) Director representing employee shareholders, appointed pursuant to Article L. 225-23 of the French Commercial Code and Article 10.3 of the Company bylaws.

The Shareholders' Meeting of May 12, 2020 will be called to approve the appointment of a new Director, Philippe Varin, who will be appointed Chairman of the Board of Directors. They will also be asked to renew the terms of office of Miriem Bensalah-Chaqroun, Delphine Ernotte Cunci, Isidro Fainé Casas and Guillaume Thivolle.

Jean-Louis Chaussade and Gérard Mestrallet did not request their terms of office be renewed. Lastly, Nicolas Bazire and Guillaume Pepy will resign from their office at the end of the Shareholders' Meeting of May 12, 2020, as per their commitment because they lost their Independent Director status after serving as Directors of the Company for more than twelve years as of 2020. These changes in the composition of the Board of Directors are detailed in chapter 14.5 of this Universal Registration Document.

If the Shareholders' Meeting of May 12, 2020 approves all the resolutions put forward relating to the composition of the Board of Directors, the Board will comprise 16 Directors as opposed to 19 before, meeting the goal to reduce the size of the Board.

14.2 Information on service contracts between members of the Company's governance and management bodies and the Company or any of its subsidiaries

To the knowledge of the Company, as of the date of this Universal Registration Document, no member of the Board of Directors or the Chief Executive Officer enjoy benefits as a result of service contracts between them and the Company or any of its subsidiaries.

14.3 Committees of the Board of Directors

In accordance with Article 15 of the Company bylaws, the Board of Directors may decide to set up committees responsible for studying issues that the Board or its Chairman may ask them to examine.

The Board of Directors was assisted by five Committees until May 14, 2019: the Strategy Committee, the Audit and Financial Statements Committee, the Ethics and Sustainable Development Committee, the Appointments and Governance Committee and the Compensation Committee. The last two Committees merged into one single committee – the Appointments, Compensation and Governance Committee. The scope of the Ethics and Sustainable Development Committee expanded, and as a result, it changed its name to the CSR, Innovation, Ethics, Water and Sustainable Planet Committee.

The Board of Directors now has four Committees. Their respective missions are described in the Board of Directors' Internal Regulations.

14.4 Report on corporate governance

This report has been prepared in accordance with Article L. 225–37 paragraph 6 *et seq.* of the French Commercial Code.

This report has been approved by the Board of Directors of February 25, 2020 upon the recommendation of the Appointments, Compensation and Governance Committee. It will be presented at the Shareholders' Meeting on May 12, 2020.

1. Composition of the Board of Directors

THE BOARD OF DIRECTORS IN 2019 [a]

50% Independent Directors [b] 41% women [c]	32% foreign nationals 6 different nationalities represented	1 employee shareholder representative 2 employee representatives	9 Board of Directors' meetings 90.8% attendance

(a) Information updated on December 31, 2019.
(b) Directors representing employees and employee shareholders are not taken into account when calculating this percentage, in accordance with the AFEP-MEDEF Code.
(c) Directors representing employees are not taken into account when calculating this percentage, in accordance with the provisions of Article L. 225–27 of the French Commercial Code.

The Board of Directors is thus composed, as of the date of this Report, of 19 Directors.

Since the beginning of 2019, the Board's composition changes are:

- the appointments of Martha Crawford and Bertrand Camus as Directors during the Shareholders' Meeting on May 14, 2019;
- the non-renewal of Valérie Bernis' and Lorenz d'Este's terms of office, which expired at the end of the Shareholders' Meeting on May 14, 2019;
- the renewal of Isabelle Kocher's, Anne Lauvergeon's and Nicolas Bazire's terms of office for a four-year period by the Shareholders' Meeting on May 14, 2019.

When new Directors join the Board of Directors, it is proposed that they have interviews with members of the Group's Management Committee and conduct site visits, so that the Group's activities can be presented to them. Regarding Directors representing employees and the Director representing employee shareholders, a specific training program was carried out, primarily concerning governance issues, the activities of the Group and the issues falling within the jurisdiction of the Board, including financial aspects, and Health and Safety themes. This program also includes language training and interpersonal skills development modules.

The bylaws provide for a four-year term of office for Directors and require every Director to hold at least 2,000 Company shares, unless otherwise provided by law, especially with reference to the Directors representing employee shareholders or employees.

Bertrand Camus, Chief Executive Officer, is the only Director with executive functions within the Group.

THE COMPOSITION OF THE BOARD OF DIRECTORS AS OF THE DATE OF THIS REPORT IS AS FOLLOWS:

- eight independent Directors:
  Nicolas Bazire, Miriem Bensalah-Chaqroun, Francesco Caltagirone, Martha Crawford, Delphine Ernotte Cunci, Anne Lauvergeon, Guillaume Pepy and Brigitte Taittinger-Jouyet;
- one Director having fulfilled executive functions within SUEZ over the last five years:
  Jean-Louis Chaussade, Chairman of the Board of Directors;
- five Directors fulfilling or having fulfilled executive functions within ENGIE:
  Franck Bruel, Judith Hartmann, Isabelle Kocher, Gérard Mestrallet and Pierre Mongin;
- the Chief Executive Officer:
  Bertrand Camus;
- one Director appointed on the proposal of La Caixa:
  Isidro Fainé Casas;
- two Directors representing employees:
  Agatta Constantini and Enric Xavier Amiguet i Rovira;
- one Director representing employee shareholders:
  Guillaume Thivolle.

Details of the terms of office and functions fulfilled by each of the Directors can be found in chapter 12.1 of the Universal Registration Document.

STAGGERED SCHEDULE OF RENEWALS

In line with best governance practices and in accordance with the recommendations of the AFEP-MEDEF Code, in 2010 the Board of Directors decided to put in place a staggered renewal of the terms of office of Directors by one third approved by the Shareholders' Meeting.

Six Directors will reach the end of their terms of office at the Shareholders' Meeting on May 12, 2020. The other Directors' terms of office will be renewed by thirds in 2022 and 2023.

Information relating to the terms of office of Directors within the Company is set out in chapter 14.1 of the Universal Registration Document.

DIVERSITY POLICY WITHIN THE BOARD OF DIRECTORS

In accordance with applicable regulations, in 2019, the Board of Directors defined a diversity policy applicable to Directors regarding criteria such as gender, expertise and professional experience, nationality and independence.

During its meeting on February 25, 2020, upon the Appointments, Compensation and Governance Committee's suggestion, the Board of Directors reviewed the Directors' skills matrix (see below) to reassess, where applicable, certain objectives of this diversity policy in an effort to reduce the size of the Board as from the May 12, 2020 Shareholders' Meeting.

The table below summarizes the diversity policy defined by the Board of Directors. The Board of Directors will ensure that this diversity policy is followed, particularly when assessing the Board's and its Committees' operations, which will include a section on evaluating this policy.

Criteria	Objectives in 2019 and implementation methods	Results for 2019	Potential reassessment of the 2020 goal
Gender balance	Maintain gender balance by identifying potential Director candidates in advance whose backgrounds meet multiple criteria of the diversity policy.	Appointment of Martha Crawford at the Shareholders' Meeting of May 14, 2019. Starting from May 14, 2019, appointment of Delphine Ernotte Cunci as chair of the Audit and Financial Statements Committee, Miriem Bensalah-Chaqroun as chair of the Strategy Committee and Anne Lauvergeon as chair of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee.	Same objective
Expertise and professional experience	Keep a diverse level of expertise and experience among members of the Board of Directors, especially in the following areas: ► SUEZ's business lines; ► digital/smart technology; ► industry; ► public services; ► international markets; ► finance; ► operational management or governance of major companies/ entrepreneurship. Expand expertise in innovation and R&D as noted by Directors during previous self-assessments	The appointment of Martha Crawford on May 14, 2019, who held various executive functions in R&D in large companies, meets this objective.	Same objective
Nationality	Continue making the Board of Directors more international by suggesting Director candidates who are not French and who also meet other diversity policy criteria – and who are from geographic areas that are not covered by the other Directors, if possible.	The proposal to appoint Martha Crawford, a US national, demonstrates the Board's will to improve the representativeness of all the regions in which the Group operates, including those outside Europe.	Same objective

Criteria	Objectives in 2019 and implementation methods	Results for 2019	Potential reassessment of the 2020 goal
Independence	Maintain the proportion of Independent Directors recommended by the AFEP-MEDEF Code. Each committee must also be chaired by an Independent Director, in accordance with the Board decision on February 26, 2019. Any Director who loses their independent status by serving for more than 12 years must commit to resign as soon as they lose their status.	Objective met in 2019	With regard to the independence of Directors, the Board will strive to increase the percentage of Independent Directors in the future, within the realm of possibility, by maintaining the percentage recommended by the AFEP-MEDEF Code.
Balance	Strike a balance between keeping Directors who have extensive knowledge of the Group and its businesses in their position for several years and integrating new members who bring new momentum and expertise to the Group.	This balance was maintained throughout 2019, with 7 members who have served less than 3 years, 4 members who have served more than 10 years and 8 members who have served between 3 and 10 years.	Same objective

As a result, as of December 31, 2019, in accordance with this policy, it is possible to record a wide range of expertise among the Directors, as shown in the following matrix:

- SUEZ's businesses: 12 Directors;
- digital/smart technology: 9 Directors;
- industry: 10 Directors;
- public services: 12 Directors;
- international market: 11 Directors;
- finance: 10 Directors;
- operational management or governance of major companies/ entrepreneurship: 14 Directors;
- corporate Social and Environmental Responsibility: 12 Directors.

INDEPENDENCE OF DIRECTORS

The independent status of some Directors (as defined by the AFEP-MEDEF Code) was reviewed in early 2020 by the Board of Directors, on the recommendation of the Appointments, Compensation and Governance Committee.

To carry out this review, the Board of Directors referred to the definition of the AFEP-MEDEF Code, which considers that *"a Director is independent if (s)he has no relationship of any kind with the Company, its Group or its management that could compromise his/her freedom of judgment"*, and took into account all the criteria of that Code. Specifically, a Director must not:

- be an employee or Corporate Officer of the Company, or an employee or Director of a company within its scope of consolidation and must not have been one during the previous five years;
- be a Corporate Officer of a company in which SUEZ directly or indirectly holds a directorship, or in which an employee appointed as such or a Corporate Officer of the Company (currently or within the previous five years) holds a directorship;
- be, or have a direct or indirect relation with, a customer, supplier or corporate or investment banker:
  - of significance to the Company or its Group, or
  - whose business has a significant share provided by the Company or Group;
- have close family ties with a Corporate Officer;
- have been a Statutory Auditor of the Company during the previous five years;
- have been a Director of the Company for more than twelve years (all Directors lose independent status at twelve years).

Regarding Company Directors whose term of office began more than twelve years ago, during its meeting on February 26, 2019, the Board of Directors voted to begin applying the principle that requires Directors who lose their independent status during their term of office to resign as soon as they lose this status. This principle shall apply in 2020 to Nicolas Bazire and Guillaume Pepy, who will have been Directors for over twelve years at that time.

Directors representing major shareholders of the Company may be considered independent provided that they do not exercise control over the Company. If a Director exceeds a threshold of 10% of the share capital or voting rights, the Board, based on the Appointments, Compensation and Governance Committee's report, must systematically review the independent status of the Director(s) concerned, taking into account the Company's ownership structure and whether or not there may be conflicts of interest. Furthermore, a non-executive Corporate Officer may not be considered independent if he or she receives variable compensation in cash or securities or any compensation related to the Company's or Group's performance.

In accordance with the AFEP-MEDEF Code, the Appointments, Compensation and Governance Committee and then the Board of Directors evaluated the significance of business relationships maintained by the Company (and its subsidiaries) with the companies (and their subsidiaries) to which the Directors are related according to the following criteria:

- the proportion of business conducted between the Group and such companies, both in terms of purchases and revenue, which is far below 1%, and the absence of economic dependence;
- whether contracting is by tender or mutual agreement;
- the type of functions exercised by the Director concerned (whether executive or not) and the certainty that it does not affect the business relationship;
- the nature of services provided; and
- the length of the business relationship.

On the basis of this analysis, business relationships between the Group and the companies (and subsidiaries) in which Directors meeting all other criteria of independence have a role in management or a directorship were not considered to be significant.

Thus, the Board of Directors, on the recommendation of the Appointments, Compensation and Governance Committee, voted, at its meeting of February 25, 2020, in relation to the review of this Chairman's Report, to:

- confirm the independence of eight Directors: Miriem Bensalah-Chaqroun, Martha Crawford, Delphine Ernotte Cunci, Anne Lauvergeon and Brigitte Taittinger-Jouyet as well as Nicolas Bazire, Francesco Caltagirone and Guillaume Pepy;
- confirm the non-independent status of the following Directors:
  - Jean-Louis Chaussade, Chairman of the Board of Directors and Bertrand Camus, Chief Executive Officer,
  - Isabelle Kocher, Judith Hartmann, Gérard Mestrallet, Franck Bruel and Pierre Mongin, as members fulfilling or having fulfilled functions within ENGIE, which holds 32.06% of the Company's share capital,
  - Isidro Fainé Casas, in view of his office as Chairman of Criteria Caixa, where Jean-Louis Chaussade is a Director,
  - Agatta Constantini and Enric Xavier Amiguet i Rovira, Directors representing employees, and Guillaume Thivolle, representing employee shareholders, due to their status as employees of a Company subsidiary.

The Board of Directors is therefore 50% composed of Independent Directors, without taking into account the Directors representing employees and employee shareholders, in accordance with the French AFEP-MEDEF Code.

Criteria / Directors	Jean-Louis CHAUSSADE	Bertrand CAMUS	Nicolas BAZIRE	Miriem BENSALAH-CHAQROUN	Franck BRUEL	Francesco CALTAGIRONE	Martha CRAWFORD	Delphine ERNOTTE CUNCI	Isidro FAINÉ CASAS	Judith HARTMANN	Isabelle KOCHER	Anne LAUVERGEON	Gérard MESTRALLET	Pierre MONGIN	Guillaume PEPY	Brigitte TAITTINGER-JOUYET	Agatta CONSTANTINI	Enric Xavier AMIGUET I ROVIRA	Guillaume THIVOLLE
Is not an employee or Executive Corporate Officer of the Company or a company of the Group [a]			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Does not have cross-directorships with another Company Executive or Director		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not have significant business relationships	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not have close family ties with a Corporate Officer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Has not been a Statutory Auditor of the Company during the previous five years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Has not been a Director of the Company for more than 12 years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not represent a shareholder holding more than 10% of the Company's share capital [a]	✓	✓	✓	✓		✓	✓	✓	✓			✓			✓	✓	✓	✓	✓
Is not a non-executive Corporate Officer receiving variable compensation or compensation that is tied to the Company's performance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Independent Director			✓	✓		✓	✓	✓				✓			✓	✓			

(a) Or has not held such a position during the previous five years.

DIRECTORS' CHARTER

The Directors' Charter, annexed to the Board of Directors' Internal Regulations, contains guidelines to which each Director must adhere in order to fully exercise their functions, ensuring the full effectiveness of their personal contribution, in accordance with the rules of independence, ethics and integrity.

The Charter states that each Director must act in the Company's interest and must represent all shareholders. It also reminds them of the principles of independence, duties of expression, loyalty, discretion, confidentiality, professionalism, commitment, and the collegiality and efficiency of the Board's work.

In addition, the Directors' Charter stipulates that every Director must inform the Board of any conflict of interest, even potential, that might directly or indirectly affect him or her. In the event that a Director cannot avoid being in a conflict of interest, (s)he must refrain from participating in discussions and any decisions on the relevant matters.

In June 2012, the Board of Directors also adopted a Code of Conduct relating to the prevention of market abuse. It was reviewed by the Board in December 2016. The main provisions of this code can be found in chapter 12.2 of the Universal Registration Document.

2. General Management

METHOD OF EXERCISING GENERAL MANAGEMENT

The Company is a public limited company with a Board of Directors that, since the date of its initial public offering in July 2008, opted to dissociate the functions of the Chairman of the Board of Directors from those of the Chief Executive Officer, whose respective duties are clearly defined in the Company bylaws and the Board of Directors' Internal Regulations.

Gérard Mestrallet and Jean-Louis Chaussade were Chairman of the Board of Directors and Chief Executive Officer, respectively, from July 2008 to May 14, 2019. Their respective terms of office expired at the end of the Shareholders' Meeting on May 14, 2019 due to reaching the statutory age limit set forth for the Chairman of the Board of Directors and the Chief Executive Officer.

The Board of Directors confirmed the dissociation of the functions of Chairman of the Board of Directors and those of Chief Executive Officer by appointing:

- Bertrand Camus as Chief Executive Officer and Jean-Louis Chaussade as Chairman of the Board of Directors as of May 14, 2019, then;
- Philippe Varin as Chairman of the Board of Directors starting on May 12, 2020, subject to being appointed as a Director.

The Board of Directors considers that dissociating the positions makes it possible to clearly separate the powers of control and determination of the Company strategy exercised by the Board, for which the Chairman shall ensure the smooth operation, from the powers of management and implementation of this strategy, which lie with the Chief Executive Officer.

DUTIES OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

In accordance with the law and Article 3 of the Internal Regulations, the Chairman of the Board of Directors organizes and manages its work and reports on it to the Shareholders' Meeting. The Chairman ensures that the Company's governing bodies function correctly and that the Directors are fit to carry out their duties. He also identifies, and if applicable, manages proven or potential conflicts of interest. The Chairman also participates in the process of appointing Directors. He may be consulted on certain significant or strategic events. He can monitor relations with shareholders, on the topic of governance.

LIMITS OF THE CHIEF EXECUTIVE OFFICER'S POWERS

The Chief Executive Officer holds the most extensive powers to act, under all circumstances, on behalf of the Company. He exercises those powers within the limit of the corporate purpose and subject to (i) the powers granted by law to Shareholders' Meetings and the Board of Directors, and (ii) internal limits on executive powers.

In this regard, the Internal Regulations define the limits on the powers of the Chief Executive Officer, which are summarized below.

- The Chief Executive Officer shall submit the following to the Board of Directors for prior approval:
  - material transactions likely to affect Group strategy or modify its financial structure, scope, activities or risk profile. The following in particular are considered material: transactions involving a commitment in excess of EUR 350 million, agreements, transactions and settlements in case of a dispute if the amount is greater than EUR 100 million, and
  - transactions that fall outside the Company's stated strategy.

  In addition, the Board of Directors specified that any acquisition, investment or disposal of an investment worth over EUR 100 million (other than maintenance capital expenditure), as well as any standard financing transactions with banks or on the bond market amounting to over EUR 700 million must have the Board's prior approval.
- In addition, the Chief Executive Officer may grant endorsements and guarantees up to a total amount granted by the Board of Directors, which in fiscal year 2019 was EUR 500 million, with an added secondary limit of EUR 100 million per transaction. Beyond these two limits, the Chief Executive Officer must request the prior approval of the Board of Directors.
- The Chief Executive Officer consults the Appointments, Compensation and Governance Committee prior to any appointment of a member of the Executive Committee.

EXECUTIVE COMMITTEE

To successfully perform his duties, the Chief Executive Officer is assisted by an Executive Committee comprising 10 other members whose biographies are provided in section 12.1.2 of the Universal Registration Document.

This Executive Committee was formed in May 2019 by the Chief Executive Officer when he took office. The Committee's membership was adjusted as of January 1, 2020 to implement the SUEZ 2030 strategic plan. The Executive Committee's membership has a better gender balance, with women accounting for 36% of Executive Committee members (compared with 30% as of December 31, 2018). The Committee has more international members, with four members of foreign nationality, in line with the Group's goal of growing the proportion of the Group's international business. The Committee has also achieved a good balance between keeping former Management Committee members and bringing new members on Board (six new members were appointed to the Executive Committee compared to its composition as of December 31, 2018). The Company has set a goal of keeping the Executive Committee gender balanced (*i.e.* at its current level).

The Company has also set ambitious goals for adding women to middle management bodies (Top Executives and the Performance Management Committee), so it can build a suitable talent pool. In 2019, women accounted for 23.5% of the Group's Top Executives and 24.5% of employees in the 10% of positions with the highest level of responsibility. In this regard, and since 2015, the long-term incentive plans of members of the Executive Committee and Top Executives include a 10% increase or decrease in this compensation depending on the level of gender balance achieved in management. This policy, driven by the Human Resources Department in line with the management of each business unit, is closely monitored by the Board of Directors and the CSR, Innovation, Ethics, Water and Sustainable Planet Committee. The gender diversity policy implemented by the Group and the results of it are detailed in chapter 15 of this Universal Registration Document.

The Chief Executive Officer is also assisted by a Performance Management Committee comprising the Executive Senior Vice Presidents of the six regions and the Group's two Global Business Units as well as the heads of the functional departments.

The composition of these committees is detailed on the Company website (www.suez.com).

3. Preparation and organization of tasks performed by the Board of Directors and the specialized Committees

FUNCTIONING AND TASKS OF THE BOARD OF DIRECTORS

The Board of Directors has Internal Regulations which, beyond the provisions of the law and the Company bylaws, set out the rules on the composition, role and powers of the Board of Directors and its Committees. The Internal Regulations are detailed on the Company's website (www.suez.com).

The Internal Regulations were first adopted by the Board of Directors on July 23, 2008 at the time of the Company's initial public offering. These Internal Regulations have been amended several times since – the last time being on May 14, 2019 to (i) combine the Compensation Committee and the Appointments and Governance Committee into one Appointments, Compensation and Governance Committee, as the Board believes it is better to limit the number of committees and that these two committees handle topics that are inseparable and (ii) define the additional missions of the CSR, Innovation, Ethics, Water and Sustainable Planet Committee, which replaced the Ethics and Sustainable Development Committee.

Activities of the Board of Directors in 2019

The Board meets as often as the interests of the Group require. In 2019, the Board met nine times (excluding the Directors' strategy seminar mentioned below), with a Board member attendance rate of 90.8% (91.5% in 2018).

They mainly dealt with subjects such as safety and security results, business reviews, the financial position and results (review of the annual, half-year and quarterly results, and analysis of earnings forecasts), the Group's financing position (debts, available cash, bond issue), the renewal of the share buyback program, governance (change in the composition of the Board of Directors and its Committees and evaluation of the organization and functioning of the Board, its Committees and the Directors' individual contributions), and reviewing the anti-corruption and Vigilance Plan. The Board's work in 2019 was also marked by monitoring preparations for the new "Shaping SUEZ 2030" strategic plan and related communications. In addition, the Board paid particular attention to topics related to compensation and especially reviewing the compensation policy of the new Chief Executive Officer, whose long-term compensation has been defined against objectives in the strategic plan. The Board has also monitored the succession process for the Chairman of the Board of Directors whose term of office is expiring at the end of the Shareholders' Meeting on May 12, 2020. As previously mentioned, Philippe Varin is to be appointed Chairman at the end of said Shareholders' Meeting, subject to his appointment as Director.

The Board also reappointed the Chief Executive Officer's annual authorization to issue endorsements and guarantees, and approved guarantee projects. The Board has carried out the annual assessment to ensure that agreements relating to current operations and entered into on normal terms and conditions continue to meet these conditions. Lastly, it regularly reviewed the work of its various Committees.

The Directors also held a meeting without the Chief Executive Officer and Company management in attendance when reviewing the "Shaping SUEZ 2030" strategic plan.

Attendance rate of Directors at Board of Directors meetings and Committee meetings in 2019

	Overall attendance rate	Board of Directors	Audit and Financial Statements Committee	Appointments, Compensation and Governance Committee [a]	Ethics and Sustainable Development Committee	Strategy Committee
Jean-Louis Chaussade	100%	100%				100%
Bertrand Camus	100%	100%				
Enric Amiguet i Rovira	88%	100%			80%	67%
Nicolas Bazire	62%	67%	50%	73%		
Miriem Bensalah-Chaqroun	83%	78%				100%
Franck Bruel	100%	100%				
Francesco Caltagirone	62%	67%				50%
Agatta Constantini	100%	100%		100%		100%
Martha Crawford	89%	100%			75%	
Delphine Ernotte Cunci	100%	100%	100%		100%	
Isidro Fainé Casas	54%	56%				50%
Judith Hartmann	100%	100%	100%			
Isabelle Kocher	62%	78%		50%		50%
Anne Lauvergeon	96%	100%	80%	100%	100%	100%
Gérard Mestrallet	89%	89%		88%		100%
Pierre Mongin	88%	100%		75%	75%	
Guillaume Pepy	100%	100%	100%	100%		100%
Brigitte Taittinger-Jouyet	95%	100%		100%	75%	
Guillaume Thivolle	95%	100%	100%		75%	
Overall Average	**87.5%**	**90.8 %**	**87.5 %**	**85.7 %**	**80.8 %**	**76.5 %**

(a) Including attendance at Compensation Committee and Appointments and Governance Committee meetings before the two committees merged and became the Appointments, Compensation and Governance Committee on May 14, 2019.

As part of the SUEZ 2030 strategic plan review, the Directors met several times at very short notice for Board meetings or Committee meetings they serve on.

Performance assessment of the Board of Directors and Committees

As part of the work undertaken by the Board of Directors to improve its composition, its functioning, its organization and its relations with the Committees, the Appointments, Compensation and Governance Committee follows a process each year to assess the functioning of the Board of Directors and its Committees. This process takes the form of a self-assessment or, at regular intervals and at least every three years, an evaluation conducted by an external consultant (who then also assesses the individual contribution of Directors). The last assessment by an external consultant was conducted during 2019. Upon the Appointments, Compensation and Governance Committee's recommendation, the Board chose outside consultants to assess the functioning of the Board and its Committees and the individual contribution of Directors. The outside consultants conducted individual interviews with each Director and submitted a report to the Appointments, Compensation and Governance Committee. This exercise helped the Board brainstorm ideas on what changes to make to the Board's composition.

The conclusions of this Board assessment were presented to the Board of Directors during its meeting on February 25, 2020. Results showed that Directors are overall satisfied with the Board's functioning, particularly due to the Board's diversity, the breadth of backgrounds and experience on the Board and extensive knowledge of the Group. The Directors reiterated their strong preference to separate the functions of the Chairman of the Board of Directors and the Chief Executive Officer. They are also satisfied overall with the functioning of the Committees, with heavily involved chairmen. Directors also emphasized how valuable the site visits during the annual strategy seminar are. However, the Directors believe the Board's size is not ideal and it limits the Board's agility. Regarding the functioning of the Board, the meetings between Directors, or, if necessary, between the Chairman of the Board and Committee Chairs, must be systematized. Directors also need to think about the Strategy Committee's role in rolling out the "Shaping SUEZ 2030" strategic plan. Concerning the Directors' individual contributions, outside consultants presented their conclusions to the Chair of the Appointments, Compensation and Governance Committee.

As a result, based on these conclusions, the Appointments, Compensation and Governance Committee will make recommendations to the Board of Directors. The Board has taken into account comments on its size with respect to the proposed Director renewals and appointments, which aim to reduce the size of the Board and which will take place at the Shareholders' Meeting.

SPECIALIZED COMMITTEES

The Board of Directors is supported by four committees: the Audit and Financial Statements Committee, the Appointments, Compensation and Governance Committee, the Strategy Committee and the CSR, Innovation, Ethics, Water and Sustainable Planet Committee.

The Internal Regulations set out the rules governing the composition and role of each Committee. The Committees have the option of requesting assistance from external experts. At its meeting on February 26, 2019, the Board also decided to apply the principle that the Chairmen or Chairwomen of the Committees will all be Independent Directors.

Minutes from each meeting of these various Committees were submitted to the Board of Directors and, where appropriate, recommendations were made for decisions within the Board's remit.

The composition (including chairmanship) of each Committee was changed at the end of the Shareholders' Meeting on May 14, 2019. The composition of each Committee between January 1 and May 14, 2019 is detailed in chapter 16 of the Company's 2018 Reference Document. The Board of Directors will conduct a new review of the composition of the various Committees to take into account changes in the Board's composition after the Shareholders' Meeting of May 12, 2020.

The Audit and Financial Statements Committee

8 meetings in 2019
87.5% attendance

75% Independent Directors

Composition

The Audit and Financial Statements Committee is composed of five members: Delphine Ernotte Cunci, Chairwoman, Judith Hartmann, Anne Lauvergeon, Nicolas Bazire and Guillaume Thivolle. With Delphine Ernotte Cunci, Anne Lauvergeon and Nicolas Bazire qualifying as independent, the proportion of Independent Directors is 75% of Committee members (excluding the Director representing employee shareholders), including the Chairwoman, in line with the recommendations of the AFEP-MEDEF Code. As described in the biographies of the members of the Audit and Financial Statements Committee in chapter 12 of this Universal Registration Document, Delphine Ernotte Cunci, Judith Hartmann, Anne Lauvergeon and Nicolas Bazire have financial and/or accounting competency based on their education or functions and as defined by Article L. 823-19 of the French Commercial Code. Moreover, Delphine Ernotte Cunci, Judith Hartmann, Anne Lauvergeon and Nicolas Bazire hold or held Senior Management positions in large corporations.

Missions

The Audit and Financial Statements Committee assists the Board of Directors in ensuring the accuracy and fair presentation of SUEZ's parent company and Consolidated Financial Statements and the quality of the internal control procedures and information provided to shareholders and financial markets. The Committee presents opinions and recommendations in the areas described below to the Board of Directors.

The Board of Directors specifically entrusts the Committee with the following engagements, consistent with the engagements defined for the Audit Committee by Article L. 823-19 of the French Commercial Code. The Company also refers to the report of the working group on Audit Committees published by the AMF on July 22, 2010.

- As regards the financial statements, the Committee:
  - monitors the process of preparing the financial information and, where applicable, draws up recommendations to ensure its integrity;
  - reviews, before publication, the draft annual and interim financial statements, the activity and income report and any financial statements (including forecasts) drawn up for specific major transactions and significant financial press releases, before they are circulated to the Board of Directors or publicly released;
  - assesses the relevance and permanence of the accounting rules and principles used in preparing the statutory and Consolidated Financial Statements and prevents any potential breach of those rules;
  - requests details of any change in the scope of consolidation and, where necessary, obtains all required explanations;
  - meets, whenever it deems it necessary, with the Statutory Auditors, Senior Management, the Finance Department, internal auditors and any other member of management; these hearings may take place, where necessary, without the presence of General Management;
  - ensures the quality of procedures to guarantee compliance with stock exchange regulations;
  - is informed annually on financial strategy and on the terms and conditions of the Group's main financial transactions;
  - is periodically informed about the Group's tax situation.
- As regards the external auditing of the Company, the Committee:
  - ensures that both the annual and Consolidated Financial Statements are audited by the Company's Statutory Auditors;
  - issues a recommendation on the Statutory Auditors' appointment or renewal at the Shareholders' Meeting; it also examines issues relating to the potential dismissal of the Statutory Auditors;
  - supervises the rules for using the Statutory Auditors for work other than the auditing of the financial statements, by ensuring observance of the principles guaranteeing the independence of the Statutory Auditors, by analyzing the risks constraining their independence, as well as the safeguard measures applied to reduce these risks;
  - gives prior approval to any duty entrusted to the Statutory Auditors outside of the legal audit of financial statements, insofar as these duties are not prohibited by the regulations;
  - monitors the fulfillment by the Statutory Auditors of their mission, taking into account, where applicable, the findings and conclusions of the Haut Conseil du Commissariat aux Comptes (Audit Office Control Board) arising from checks that it may carry out;
  - examines the additional report prepared by the Statutory Auditors, which is intended for it;
  - examines each year with the Statutory Auditors the audit fees paid by the Company and the Group to entities of the networks to which the Statutory Auditors belong, their audit schedule, the conclusions reached by the latter, their recommendations, and the follow-up to these recommendations;
  - examines each year with the Statutory Auditors the amounts of fees relating to duties not arising from the legal audit paid by the Company and its Group to entities of the networks to which the Statutory Auditors belong;
  - arbitrates, where necessary, on issues that may arise between the Statutory Auditors and General Management in the course of their work.

- As regards internal control and auditing of the Company, the Committee:
  - monitors the efficiency and the quality of the Group's internal control systems, as well as the internal audit, with regard to the procedures relating to the preparation and handling of accounting and financial information without this infringing its independence;
  - examines, with the heads of internal audit, the audit schedules and action plans involved in internal audit, the conclusions of these audits and actions, and the recommendations and their follow-up, without General Management necessarily being present;
  - is informed by General Management, or by any other means, of any complaints from third parties or any internal information critical of the Company's accounting documents or internal control procedures, as well as the procedures put in place for this purpose and the remedies for such claims or criticisms;
  - entrusts the internal audit with any assignment it deems necessary.
- As regards risks and commitments, the Committee:
  - evaluates the efficiency and quality of the Group's systems and procedures for evaluating and managing risks;
  - is regularly updated on the Group's financial and cash position and major commitments and risks;
  - is regularly informed of the Group's main disputes.

Activity in 2019

The Audit and Financial Statements Committee met eight times in 2019 (including once with the Strategy Committee), with an attendance rate of 87.5%. The Committee has regular discussions with Company executives who are responsible for matters within the Committee's scope of authority: Executive Senior Vice President in charge of Finance, General Secretary, Group Director of Internal Audit, Risk and Investment, Group General Counsel, Director of Accounting, Consolidation, Tax and Internal Control, Director of Treasury and Capital Markets, Director of Corporate Planning and Finance, Director of Financial Communications. The Statutory Auditors, barring exceptional circumstances, attend all Audit and Financial Statements Committee meetings.

The main issues the Committee addressed were as follows: review of the annual financial statements as of December 31, 2018, the half-year financial statements as of June 30, 2019, quarterly results and related press releases, a review of the 2019 budget, the financing and debt situation, financial aspects of the "Shaping SUEZ 2030" strategic plan (including proposed changes in financial reporting under this plan) as well as monitoring dialog between the Company and shareholders and investors, especially after the "Shaping SUEZ 2030" strategic plan is announced.

The Statutory Auditors presented to the Committee highlights of the Company's results, the main accounting options retained and Key Audit Matters of the financial statements audit for the year in accordance with the provisions relating to justifying their assessment.

In addition, the Committee was asked to discuss earnings forecasts and updates, cash flow projections, and the estimated financial documents for the current fiscal year. An overview of the off-balance sheet commitments of the Group, for which a report is issued at closing of the consolidated half-year and annual financial statements, was also carried out by the Finance Department.

The Committee supervised the execution of the 2019 internal audit plan and the main conclusions of the most significant audits. The Committee also reviewed and monitored progress in the internal control plans defined in conjunction with the main Group entities. The Committee also reviewed the internal audit and internal control plans for 2020.

The Committee reviewed the risk mapping presentation prepared by the Executive Committee with support from the Risk and Investment Department (including labor and environmental risks), as well as the measures taken to manage identified risks. The Committee regularly took stock of the major litigation cases in progress. The Committee also examined the Group's policy with respect to insurance.

In 2019, the Committee approved the fees paid to the Statutory Auditors. The Committee also gave its approval to the tasks assigned to the Statutory Auditors outside their audit responsibilities. The Committee spoke with the Statutory Auditors without Company Management in attendance.

Appointments, Compensation and Governance Committee

15 meetings in 2019 [a]
85.7% attendance [a]

60% Independent Directors

(a) Including Compensation Committee and Appointments & Governance Committee meetings before the two committees merged together to become the Appointments, Compensation and Governance Committee on May 14, 2019.

Composition

The Appointments, Compensation and Governance Committee is composed of six members: Guillaume Pepy (chair), Agatta Constantini, Isabelle Kocher, Brigitte Taittinger-Jouyet, Nicolas Bazire and Gérard Mestrallet.

With Brigitte Taittinger-Jouyet, Guillaume Pepy and Nicolas Bazire qualifying as independent, the proportion of Independent Directors is 60% of the Committee members (excluding the employee representative Director), in line with the recommendations of the AFEP-MEDEF Code.

The Chief Executive Officer is not a member of the Appointments, Compensation and Governance Committee, in accordance with the AFEP-MEDEF Code. He participates in Committee meetings when the succession plan for the main executives of the Group is discussed. He is involved in the selection process for new Directors (with the Chairman of the Board of Directors), as well as other Committee work. In addition, he does not participate in discussions regarding his own position.

Missions

The Board of Directors tasks the Appointments, Compensation and Governance Committee with the following:

- regularly reviewing the principles and independence criteria relating to members of the Board of Directors considered to be Independent Directors;
- examining all applications for appointment to a seat on the Board of Directors or as a Board observer, where applicable, and formulating an opinion and/or recommendation to the Board of Directors on these applications;
- formulating all pertinent recommendations regarding the composition of Committees;

- preparing, in due course, recommendations for the successor to the Chief Executive Officer and, where necessary, the Chairman of the Board of Directors;
- preparing the discussions of the Board of Directors regarding the appointment of one or more Chief Operating Officers;
- periodically reviewing the succession plan for members of the Executive Committee and the main executives;
- ensuring that the Company applies rules in the area of governance, especially the recommendations of the AFEP-MEDEF Code;
- formulating recommendations on governance issues that fall under the competence of the Board of Directors, especially with regard to implementing differentiated rights for certain categories of shareholders;
- setting the Chief Executive Officer's targets each year, which will subsequently serve as a reference in assessing his performance and in determining the portion of his compensation that is performance-based, and to assess, in due course, the level at which these performance criteria were achieved;
- making recommendations to the Board of Directors on compensation, retirement and employee benefit schemes, benefits in kind, and other cash entitlements, including, when applicable, the allocation of a long-term compensation in the form of stock options to subscribe or purchase shares of the Company, as well as the allocation of bonus shares or cash to the Chairman, Chief Executive Officer, and if applicable, the Chief Operating Officers *(Directeurs Généraux Délégués)*;
- preparing the Board's work on issues related to employee shareholding and long-term incentive plans;
- making recommendations to the Board of Directors on the compensation of Directors and, if applicable, any Board observers.

The Committee is also consulted on appointments to positions on the Executive Committee. It is informed beforehand of the changes to managerial structures in the Group and of changes in its senior executives.

Lastly, the Committee is tasked by the Board of Directors with issuing an opinion on any new office that the Chief Executive Officer might consider holding in a listed French or foreign company. The Committee is also informed of any new office held by a Director in a listed French or foreign company (including on a Committee).

Activity in 2019

Two committees existed until May 14, 2019: an Appointments & Governance Committee, which met three times in 2019, and a Compensation Committee, which met four times in 2019. These two committees merged and became the Appointments, Compensation and Governance Committee, which met eight times in 2019. The overall attendance rate for these committees was 85.7%.

In 2019, the activity of the Appointments and Governance Committee and the Compensation Committee, then the Appointments, Compensation and Governance Committee, focused in particular on issues related to the succession of the Chief Executive Officer and Chairman.

The Chairman of the Board's and the Chief Executive Officer's compensation (for 2019) as well as annual variable compensation (for 2019 and 2020) and long-term compensation (for the period 2019-2021) for the Chief Executive Officer and Group senior executives were reviewed within the context of the succession and implementation of the new strategic plan.

The Committee was also consulted on the new management structure proposed by the Chief Executive Officer as part of the "Shaping SUEZ 2030" strategic plan roll-out and paid close attention to the diversity policy applied to Group senior executives. The activity was marked by monitoring the succession process for the Chairman of the Board. As a result, the Committee met very regularly to define the process for selecting candidates for Chairman, then to complete the different steps of this process in order to make a recommendation to the Board of Directors. With the support of outside consultants, as part of the assessment mentioned above, the Committee began by collecting Directors' opinions on the profile to look for. It then reviewed candidates who matched the profile defined. It hosted the candidates selected to assess and analyze them and their vision for the Group. Lastly, after having heard a diverse array of opinions on the candidates, and although the other candidates were excellent, the Committee formulated a recommendation to the Board that resulted in the unanimous appointment of Philippe Varin as Chairman effective as of May 12, 2020 (subject to his appointment as a Director by the Shareholders' Meeting on May 12, 2020). Taking into account changes in the Board's composition resulting from the departure of a certain number of Directors in 2019 and in 2020, the Committee also conducted a process to select new Directors in preparation for the Shareholders' Meeting on May 14, 2019 (the process led to the appointment of Martha Crawford). At such times, the Committee reviews the composition of the various committees and sends the Board its recommendations on changes to their composition, as was done at the end of the Shareholders' Meeting of May 14, 2019.

Lastly, the Committee worked on a new employee share issue which was rolled out during the 4th quarter of 2019.

The Strategy Committee

4 meetings in 2019 [a]
76.5% attendance

57% Independent Directors

(a) Including one joint meeting with the Audit and Financial Statements Committee.

Composition

The Strategy Committee is composed of nine members: Miriem Bensalah-Chaqroun (chair), Agatta Constantini, Isabelle Kocher, Anne Lauvergeon, Enric Amiguet i Rovira, Francesco Caltagirone, Jean-Louis Chaussade, Isidro Fainé Casas and Guillaume Pepy.

Miriem Bensalah-Chaqroun, Anne Lauvergeon, Francesco Caltagirone and Guillaume Pepy are Independent Directors. The Committee is thus 57% composed of Independent Directors (excluding the Directors representing employees).

Missions

The Strategy Committee gives its opinion and submits a recommendation to the Board of Directors concerning:

- the strategic objectives set by the Board of Directors or proposed by the Chief Executive Officer; and
- all significant projects submitted to the Board of Directors involving internal and external growth, disposal, strategic agreements, alliances and partnerships.

Upon presentation of a report by the Chief Executive Officer, the Committee carries out a strategic review once a year, which it submits in due time to the Board of Directors.

Activity in 2019

In 2019, the Strategy Committee met four times (including once jointly with the Audit and Financial Statements Committee), with an attendance rate of 76.5%.

The Committee looked closely at the different components of the "Shaping SUEZ 2030" strategic plan during its development. The plan was driven by Bertrand Camus, Chief Executive Officer since May 14, 2019 and it was introduced to the market on October 2, 2019. The Committee's work also involved preparing for the Board of Directors' strategy seminar.

All of the Directors met in November 2019 for a two-day strategy seminar. During the seminar, Directors had deeper discussions about several components of the "Shaping SUEZ 2030" project and how they will be rolled out operationally. As a result, they established a detailed report on the R&D, innovation and digital technology roadmap, on asset rotation and on performance as well as on organizational and transformational challenges related to the new strategy.

The CSR, Innovation, Ethics, Water and Sustainable Planet Committee

5 meetings in 2019
80.8 % attendance

75% Independent Directors

Composition

The CSR, Innovation, Ethics, Water and Sustainable Planet Committee comprises six members: Anne Lauvergeon (chair), Martha Crawford, Brigitte Taittinger-Jouyet, Enric Xavier Amiguet i Rovira, Pierre Mongin and Guillaume Thivolle. With Anne Lauvergeon (chair), Martha Crawford and Brigitte Taittinger-Jouyet qualifying as independent, the proportion of Independent Directors is 75% of the Committee members (excluding the employee representative Director and the employee shareholder representative Director).

Missions

The CSR, Innovation, Ethics, Water and Sustainable Planet Committee (which replaced the Ethics and Sustainable Development Committee in mid-May 2019) ensures compliance with the individual and collective values on which the Group bases its actions and the rules of conduct that all staff members must follow.

These values include the Group's specific responsibilities with respect to environmental protection and improvement and sustainable development. The Group ensures that the necessary procedures are in place to:

- update the Group's current Ethics Charter and ensure that it is circulated and applied;
- ensure that French and foreign subsidiaries implement the Group's Ethics Charter, taking into account the domestic legal and regulatory framework of the country where they carry out their business;
- carry out training programs intended to support the circulation of the Group's Ethics Charter;
- obtain from the various Group companies information on the solutions they have selected for issues presented to their own Committee.

The CSR, Innovation, Ethics, Water and Sustainable Planet Committee reviews and assesses:

- the Group's sponsorship and philanthropic initiatives;
- the Health and Safety policies implemented, including their objectives and results;
- the risk management systems and policies involving corporate social responsibility and sustainable development.

This Committee's missions were extended until mid-May 2019. It now also reviews and assesses:

- the innovation policies the Group applies, including acquisitions in this area;
- the process of preparing non-financial information, and especially the non-financial performance statement as well as non-financial ratings awarded to the Group.

Activity in 2019

In 2019, the Committee met five times, with an attendance rate of 80.8%.

The main topics addressed by the Committee were the Health and Safety policy with the 2018 review and the draft action plan to be implemented in 2019, the Environmental and Industrial Risk Management Policy, and the quality of drinking water, the conformity of wastewater and air quality. The Committee reviewed the results and the action plan from the "Tell us" 2018 engagement survey and began working on defining SUEZ's purpose, in line with the definition of the "Shaping SUEZ 2030" strategic plan.

The ethics policy and anti-corruption measures were also reviewed with the presentation of the 2018 Report on Ethics and the 2019 action plan. The Committee also reviewed the corruption risk mapping updated in 2019. The Committee reviewed the Group Vigilance Plan. Furthermore, the Committee examined the policy in terms of gender, salary equality, diversity and the actions to be implemented and also reviewed training in the context of the Group's transformation in France and the Social Report as of December 31, 2018. Finally, the Committee reviewed the non-financial ratings attributed to the Group.

4. Compensation and benefits of all kinds granted to Corporate Officers

This point is addressed in detail in chapter 13 of the Universal Registration Document.

5. Corporate governance code

The Company follows the corporate governance recommendations defined by the French Association of Private Companies (AFEP) and the Movement for the Companies of France (MEDEF) in the AFEP-MEDEF corporate governance code for listed companies (the "AFEP-MEDEF Code"). The latest version of this code, dated January 2020, can be viewed on the website www.medef.fr.

The Company referred to the latest version of the AFEP-MEDEF Code published in January 2020 for the preparation of this Report on corporate governance.

The Company fully adheres to AFEP-MEDEF Code recommendations.

6. Specific terms and conditions governing shareholder participation in Shareholders' Meetings

The terms and conditions governing shareholder participation in Shareholders' Meetings are set forth in the Company bylaws under section VI, Shareholders' Meetings, Articles 20-23, available at www.suez.com.

7. Factors likely to have an impact in the event of a takeover bid

Factors likely to have an impact in the event of a takeover bid, as listed in Article L. 225–37–5 of the French Commercial Code, are set forth in section 16.3.2 of this Universal Registration Document.

8. Authorizations and delegations of authority granted by the Shareholders' Meeting

The authorizations and delegations of authority in effect were approved by the Company's Shareholders' Meetings of May 17, 2018 and May 14, 2019.

Authorization/Delegation of authority	Period of validity	Authorized cap	Amount used	Balance
1 Authorization granted to the Company to trade in its own shares (2019 Shareholders' Meeting, Resolution 17)	18 months as from 5/14/2019	Up to a maximum holding of 10% of the share capital	0.52% as of 12/31/2019	9.48%
2 Cancellation of treasury shares (2019 Shareholders' Meeting, Resolution 18)	26 months as from 5/14/2019	10% of the share capital per 24-month period	2,970,050 shares canceled [d]	9.52%
3 Share capital increase, with shareholders' preferential subscription rights, by issuing common shares and/or any transferable securities granting access to the Company's equity securities or granting rights to the allocation of debt securities (2018 Shareholders' Meeting, Resolution 18)	26 months as from 5/17/2018	EUR 497 million [a]	Not used	Not used
4 Share capital increase, without shareholders' preferential subscription rights, by a public issue of the Company's common shares and/or any transferable securities granting access to the Company's equity securities or granting rights to the allocation of debt securities (2018 Shareholders' Meeting, Resolution 19)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
5 Issue, through an offer as set out in Article L. 411-2-II of the French Monetary and Financial Code (a "private placement"), of common shares and/or transferable securities granting access to the Company's capital, without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 20)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
6 Increase, by up to 15% of the initial issue, in the number of shares to be issued in the event of a capital increase, with or without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 21)	26 months as from 5/17/2018	Up to 15% of the original issue [a] [c]	Not used	Not used
7 Share capital increase in consideration of contributions in kind consisting of equity securities or securities granting access to the capital (2018 Shareholders' Meeting, Resolution 22)	26 months as from 5/17/2018	EUR 248 million (up to 10% of capital) [a] [b]	Not used	Not used

(a) Resolution 28 of the 2018 Shareholders' Meeting set a limit on the total nominal amount of capital increases that may be carried out, immediately or in the future, pursuant to Resolutions 18 to 27 of the 2018 Shareholders' Meeting, of EUR 497 million for issues of shares and/or transferable securities representing debt or similar securities conferring entitlement to the Company's share capital and of EUR 3 billion for issues of transferable securities granting access to equity securities to be issued by the Company, or which grant entitlement to the allocation of debt securities.
(b) Common ceiling of a nominal amount of EUR 248 million, to which the total nominal ceiling set in Resolution 28 of the 2018 Shareholders' Meeting will be assigned.
(c) Subject to the ceiling of the authorization under which the issue is decided.
(d) Cancellation of 2,970,050 treasury shares dated January 28, 2020.

Authorization/Delegation of authority	Period of validity	Authorized cap	Amount used	Balance
8 Share capital increase in consideration for securities contributed as part of a public exchange offer initiated by the Company, without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 23)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
9 Share capital increase through issues of shares or securities granting access to the share capital reserved for members of a company savings plan without shareholders' preferential subscription rights for those employees (2019 Shareholders' Meeting, Resolution 19)	26 months as from 5/14/2019	EUR 50 million [a]	9,047,317 shares issued [c]	EUR 13,810,732
10 Share capital increase, without shareholders' preferential subscription rights, in favor of the class (es) of named beneficiaries, as part of the implementation of the SUEZ Group international shareholding and savings plans (2019 Shareholders' Meeting, Resolution 20)	18 months as from 5/14/2019	EUR 12 million [a]	922,733 shares [d] issued	EUR 8,309,068
11 Allocation of bonus shares in connection with an employee shareholding plan (2019 Shareholders' Meeting, Resolution 21)	26 months as from 5/14/2019	0.05% of the share capital	119,604 matching shares granted under company contributions as part of the Sharing 2019 plan	191,077 shares
12 Free allocation of performance shares (2018 Shareholders' Meeting, Resolution 27)	26 months as from 5/17/2018	0.5% of the share capital	777,944 performance shares granted [e]	2,328,868 shares

(a) Resolution 28 of the 2018 Shareholders' Meeting set a limit on the total nominal amount of capital increases that may be carried out, immediately or in the future, pursuant to Resolutions 18 to 27 of the 2018 Shareholders' Meeting, of EUR 497 million for issues of shares and/or transferable securities representing debt or similar securities conferring entitlement to the Company's share capital and of EUR 3 billion for issues of transferable securities granting access to equity securities to be issued by the Company, or which grant entitlement to the allocation of debt securities.
(b) Common ceiling of a nominal amount of EUR 248 million, to which the total nominal ceiling set in Resolution 28 of the 2018 Shareholders' Meeting will be assigned.
(c) Issue of 9,047,317 new shares under Resolution 19, representing a capital increase of EUR 103,675,916.68 (including 36,189,268 in par value and EUR 67,486,648.68 in issue premiums), carried out as part of the Sharing 2019 employee shareholding plan.
(d) Issue of 922,733 new shares under Resolution 20, representing a capital increase of EUR 10,910,383.68 (including EUR 3,690,932 in par value and EUR 7,219,451.68 in issue premiums) carried out as part of the Sharing 2019 employee shareholding plan.
(e) Free allocation of 777,944 performance shares on July 25, 2018 under the long-term incentive plan.

14.5 Future changes to the governance and management bodies

On February 25, 2020, the Board of Directors voted to propose the following to the Shareholders' Meeting on May 12, 2020:

- the renewal of Miriem Bensalah-Chaqroun's, Delphine Ernotte Cunci's and Isidro Fainé Casas' terms of office as Directors;
- the renewal of Guillaume Thivolle's term of office as a Director representing employee shareholders; and
- the appointment of Philippe Varin as a Director, as the Board of Directors had voted to appoint him Chairman of the Board of Directors at the end of the Shareholders' Meeting on May 12, 2020.

Regarding Directors whose term of office is subject to renewal, the Board believes that their renewal was in the Board's and the Company's best interest in light of their expertise and their skills. Their renewals also meet the diversity policy objectives set by the Board.

Miriem Bensalah-Chaqroun has not only shared her experience as a high-level Chief Executive and Chairwoman of the Moroccan Confederation of Business Associations, but she has also increased the Board's proportion of women and international diversity for the last four years. She has extensive knowledge of the Moroccan market – a country in which the Group is very active – in both the water business through Lydec and in the Recycling and Recovery business. The Board also appreciated Miriem Bensalah-Chaqroun's contributions on the Strategy Committee, which she has chaired since May 14, 2019, and her work defining the Group's new "Shaping SUEZ 2030" strategic plan. In addition, the Board looked at her rate of attendance at Board meetings and Strategy Committee meetings, which was 83% overall in 2019, and 100% for the Strategy Committee, demonstrating her commitment to the Board's and the Committee's work.

Regarding Delphine Ernotte Cunci, the Board appreciated her experience and expertise, which has enabled her to contribute significantly to the Board's and Committee's work since 2012. The Board particularly noted her major involvement in the Board's and Committee's work throughout the year. Delphine Ernotte Cunci chaired the Ethics and Sustainable Development Committee until May 14, 2019, then the Audit and Financial Statements Committee after that date. Delphine Ernotte Cunci had a 100% attendance rate to Board meetings and Committee meetings she was a member of. She also made constructive comments regarding the preparation of the Group's new strategy.

The Board has also made sure that Miriem Bensalah-Chaqroun and Delphine Ernotte Cunci continue to meet all independence criteria in the AFEP-MEDEF Code.

Isidro Fainé Casas has top-level international experience in the banking sector, enabling him to provide his perspective during Board meetings, especially on issues related to financing major projects. The Board would like to continue benefiting from this expertise as well as Isidro Fainé Casas's knowledge of the Spanish market – one of the Group's largest markets. As a reminder, Isidro Fainé Casas is Chairman of Criteria Caixa, a long-standing partner of SUEZ in Spain and SUEZ's second largest shareholder since SUEZ and Criteria Caixa signed an agreement in July 2014 providing for a representative of Criteria Caixa to sit on the SUEZ Board of Directors.

The reappointment of Guillaume Thivolle as a Director representing employee shareholders is subject to a vote by shareholders on the proposal of employee shareholders, who account for 4.1% of the share capital as of the date of this report and after having participated in the process to appoint candidates to this directorship within SUEZ Group. This process could lead to three candidates being presented to shareholders to be voted on: one candidate elected on its own by the FCPE employee shareholding Supervisory Board whose unitholders are French residents; one candidate elected on their own by the FCPE employee shareholding Supervisory Board whose unitholders are not French residents; and a candidate elected by registered employee shareholders who directly hold their shares, subject to having previously obtained sponsorships from registered employee shareholders, which account for at least 3% of the total number of registered shares held by this category of shareholder. Guillaume Thivolle's candidacy was the only candidate that emerged from this appointment process. The renewal of his term of office is therefore submitted to shareholders for voting in accordance with Article 10.3 of the Company's bylaws.

As a reminder, Jean-Louis Chaussade (Chairman of the Board of Directors) and Gérard Mestrallet did not request their terms of office be renewed, and Nicolas Bazire and Guillaume Pepy committed to resigning from their office at the end of the Shareholders' Meeting on May 12, 2020.

As a result, on January 31, 2020, the Board of Directors announced that it was proposing Philippe Varin as a Director during the Shareholders' Meeting on May 12, 2020 and that if he is appointed as a Director, he would be named Chairman of the Board starting from that date. The Board considered that Philippe Varin's experience and expertise would be a major asset for the Company serving as Chairman of the Board. Consequently, the Board chose an independent candidate with extensive industrial and international experience and expertise who already knows how companies with a separate CEO and Chairman work due to his experience as non-executive Chairman of Orano Group.

If the Shareholders' Meeting adopts all of these proposals, the Board would comprise 16 members, including:

- 7 Independent Directors *i.e.* 54% of its members (not counting Directors appointed on the proposal of employees and employee shareholders, in accordance with the recommendations of the AFEP-MEDEF Code);
- 8 women, *i.e.* 50% of its members (or 7 women, *i.e.* 54% of its members, not counting Directors appointed on the proposal of employees and employee shareholders, in line with the proportion required by law);
- 6 Directors of foreign nationality, *i.e.* 37.5% of its members, with 6 different nationalities represented.

The Board of Directors

15 Employees

15.1 Human Resources

15.1.1 A Human Resources Management policy supporting the SUEZ 2030 project

SUEZ's ambition for the "Shaping SUEZ 2030" plan is to make us a world leader in environmental services. This plan requires a major top-down transformation for the Group from now through 2023.

The Group's transformation and new values – passion for the environment, customer focus, respect and team spirit – would not be possible without the energy and expertise of our employees. Because of this, the "HR and culture" component is one of the four pillars of the "Shaping SUEZ 2030" plan.

The HR Roadmap aims to make SUEZ employees a core part of our future success. This Roadmap is based on three key principles for the SUEZ 2030 employment pact:

- engage in meaningful dialogue;
- launch innovative employment processes;
- build a culture of accountability.

It includes a SUEZ plan centered on human capital, which focuses on five objectives:

- rolling out a winning corporate culture, preparing new ways to work and developing our leadership;
- developing expertise in our businesses;
- supporting SUEZ's digital revolution;
- taking care of our employees;
- providing competitive and effective HR services.

All policies and procedures that are described below per major area are geared towards meeting these objectives.

This support concerning the Human Resources Management of the Group's acceleration and transformation is provided in cooperation with all of the internal stakeholders, through continuous dialogue with the managers, the employees and the social partners.

15.1.2 Values and ethics

Ethics has always been a core part of SUEZ's strategy and development, and the Group makes ethics an essential component in improving performance and competitiveness.

The Group's ethics policies are derived from the fundamental principles that guide our conduct and are supported by the Ethics Charter:

- act in compliance with the law and regulations;
- build a deep-rooted culture of integrity;
- demonstrate loyalty and honesty;
- respect others.

The subject of ethics is an integral part of assessing employee contributions. The annual review process, which is now integrated into the HRIS tool deployed to 80% of the population, includes an assessment conducted between the employee and manager on how well the employee, their team or their business sector applies and adheres to SUEZ's ethical standards.

The Group strives to maintain quality human relationships: listening and accountability are the foundations of respect. In this context, it is the responsibility of management to enable all employees to perform their jobs in good physical and psychological conditions.

SUEZ has established four Values which make up the new foundation for its culture and its will to win: Passion for the environment, Customer focus, Respect and Team spirit. These Values are the founding principles of the corporate vision, "Shaping SUEZ 2030". They reflect the vision, inform the strategic decisions and guide the Group's action. The Group is now going to be more transparent in showing its customers, partners and all its stakeholders how committed the Group is to saving the planet through the way its employees show its values in their work.

PASSION FOR THE ENVIRONMENT

Contribute to preserve and restore the planet's natural capital

In all our actions, help reduce, re-use, recycle, recover water and resources, and aim to have a positive impact on climate

CUSTOMER FIRST

Be accountable for clients and make things happen

Be open-minded and innovative

Use the organisation's agility to be competitive

Develop a partnership culture to provide the best solutions for our clients

RESPECT

Care for the safety and well-being of everyone

Act ethically and with integrity

Respect the diversity of other people's skills, personalities and background

Care for the social impact of our actions and act to reduce inequality

TEAM SPIRIT

Collaborate at every level to team work

Trust others and learn from them

Share information and promote open communication

15.1.3 Our Human Resources strategy

Developing everyone's talents

SUEZ can count on the commitment of its 90,000 employees every day to solve its customers' problems.

In order to support the Group's growth and development, SUEZ's Talent & Development policy is based on three pillars: develop the skills of employees, support them in building enriching career paths, and lastly, enable the Group to grow and be agile in its transformation.

► **Talents**

Managers and HR work together to ensure employee performance and development is supervised in an optimal and individualized way. The appropriation by managers of the tools available to them is a sign of progress and success. We are now tracking more than 80,000 employees *via* the Group's HRIS software.

The process to identify high-potential talents in this employee performance database is being incorporated at the local management level. This People Reviews approach takes place on a cascade basis, which enables us to give every person at every level (local and central) an individualized and appropriate response.

This process, rolled out to all SUEZ Group entities, makes it possible to review the performance of all employees from each entity and to offer means of development to each of them. In fact, at all job levels in the organization, employees of the Group benefit from support that enables them to grow (training, internal mobility, career interviews, etc.). The purpose of this is to address the current and future development requirements of the Group. The People Reviews are also an opportunity for all entities to carry out a comprehensive review of "Talents", whose careers are specifically monitored at Group level.

The Talents identified are divided into three categories: Global Talents, BU Talents (57% of talents are in these two categories) and Emerging Talents (43% of talents).

In order to develop our Talents, SUEZ makes different development programs (French and international) available to all our entities through the SUEZ Academy, such as:

- Development Center: a program that allows them to assess where they stand in terms of skills and to reflect, accordingly, on their development,
- Learning with stakeholders: a program aiming to open employees up to new perspectives by teaching them about different cultures and operating methods through international exposure,
- Executive Program: a program launched in 2019 for future executives. It is designed to help participants understand business transformations in an international environment. This program is certified by the IESE Business School, SUEZ's partner for this program,
- Global Mind Opener: international program on digital technology,
- Local Mind Opener: a program for managers to help them learn about their local innovation ecosystem,
- New Joiners: orientation program for new managers launched in 2018. This is a two-day seminar with Executive Committee members in attendance.

► **Experts**

The Group has defined a new policy for technical Experts to meet the challenge of transferring know-how and supporting new market growth. This policy enables the Group to better identify, develop and provide visibility and recognition to the Experts, as well as enabling them to network with each other.

In a joint People and Knowledge Management approach, the Group has listed technical areas of expertise enabling the identification of Experts in a consolidated manner for all entities. As a result, in 2019, SUEZ defined three new areas of expertise related to the air, agriculture and data markets, which supplement the 25 existing Group areas.

This collaborative work has helped identify a thousand experts within the Group.

SUEZ has appointed a Lead Expert in each area of expertise, who represents the Group and promotes its expertise around the world. This Expert conveys the vision of the technological developments taking place within SUEZ's businesses.

Like Talents, Experts are identified by operational and HR managers during People Reviews, then approved by a technical committee.

In addition to the Lead Expert category mentioned above, two other Expert categories already exist within the Group: Key Experts and Experts.

Apart from the special attention paid to Lead Experts during annual compensation reviews, Lead Experts receive special Career Management support and dedicated development programs (personal development support and coaching for 6 months). They meet every year to network with one another and with executive management by taking part in Learning seminars or programs (Global Mind Opener).

They are also tasked with sharing their knowledge *via* training sessions and technical assistance missions. To do this, the Group allocates several days per year to them to encourage them to share their expertise.

- **Generational transition**

  SUEZ plans to hire more young graduates to help create age diversity and acquire new skills in line with changes in the business. In 2019, 2,500 young people worked in various Group entities through internships, part-time learning contracts or French international internships (VIE). The Group builds and develops partnerships with schools and training centers to make sure there are enough technical skills in the future.

  In order to attract and develop these profiles, the Group offers Graduate Programs in various countries (France, United States, Asia, etc.) for talented young people who are passionate about sustainable resource management. These Graduate Programs are true programs for excellence that aim to support students in higher education to management or expert-level positions, offering them opportunities to join, grow and advance within the Group.

- **Acquiring and developing new business skills, digital skills or new skills in line with the industrial markets**

  In order to confront the challenges faced by the industrial markets, SUEZ is continuing to develop the skills of our sales people through dedicated training programs.

  SUEZ also encourages cross selling by setting up incentive measures as well as synergies between the various Group businesses and teams, thanks to our robust internal mobility policy.

  SUEZ also prioritizes developing digital expertise to meet the challenges related to transformation, process and business automation and the emergence of new markets, which impact all of SUEZ's businesses.

  In fact, SUEZ is actively preparing for transition by including new positions in our recruiting plan, such as Data Analyst and Data Scientist, whose role is to analyze data streams to optimize and monitor them in real time.

Supporting employees when their position goes digital is one of the Group's priorities. To do this, SUEZ has developed specific dedicated training for employees to teach them how their job is changing and equip them with the skills they will need.

Training is a fundamental concern

For SUEZ, developing people is key to the Group's transformation as well as to its social and societal responsibilities. The ambition for 2021, as mentioned in the SUEZ Sustainable Development Roadmap, is to train more than 80% of the Group's employees and make "apprenticeship for all" a reality within the Group.

The "SUEZ Academy" is an international center of excellence that offers learning solutions for the Group's managers and employees. It promotes an adapted and harmonized corporate culture and strengthens employee engagement, innovation and performance throughout the Group.

Eight academies offer rich and innovative programs tailored to SUEZ's business:

- the Leadership academy;
- the Digital and Innovation academy;
- the Technical academy;
- the Sales and Marketing academy;
- the Health and Safety academy;
- the Cross-Disciplinary Functions academy;
- the Operational Excellence academy;
- the SUEZ Culture academy, created in 2019.

In 2019, the Group placed a strong emphasis on safety and security *via* a massive awareness-raising campaign for operational managers and leaders by the **Health and Safety Academy**. This program must continue over the next few years so that 100% of operational managers are trained by 2021. The plan is to expand the program to all Group managers, including managers in support and sales functions.

Helping all employees **adapt to Digital Technology** has also been a central initiative of the "SUEZ Academy";

- launch of a modular and customizable digital program called "Let's Talk Digital" for all employees, using videos to introduce and teach concepts related to new technologies, how to use them, and their impacts on society and on the business world. This program is continuing in 2020;
- launch of a mandatory e-learning course to raise awareness about data protection for all employees;
- setting up of development programs for digital skills such as Agile and Design Thinking, which the Group aims to deploy more broadly in 2020;
- provision of a large catalog of tutorials to encourage employees to master Microsoft Office 365 applications.

Lastly, the Group has created the **SUEZ Culture Academy** to accelerate the spread of the Group's values in 2020. In fact, the Shaping SUEZ 2030 survey showed that all Group employees have strong expectations regarding the four values that now form the core of the Group's strategy: Passion for the environment, Respect, Customer focus, and Team spirit.

The value "Passion for the environment" is a key driver of employee engagement in particular.

That is why, in 2019, the SUEZ Culture Academy defined a program called "the environmental time line" based on a fun and educational workshop that aims to:

- raise employees' awareness of environmental challenges and how urgently we need to act;
- explain SUEZ's impact on the environment and how everyone contributes to improving this impact in their everyday activity;
- get everyone involved to meet the sustainable development objectives in the Shaping SUEZ 2030 strategic plan.

Tested at the end of 2019, this program will be rolled out in 2020 with the goal of training 100% of employees through this workshop.

In addition to this program, the SUEZ Academy supports the spread of all our values through these eight academies, as shown in the diagram below.

To guarantee the excellence of the programs offered, the "SUEZ Academy" is based on an ecosystem:

- SUEZ's expertise in learning: to meet the needs of our current and future customers, SUEZ has developed a range of targeted apprenticeship solutions based on our expertise in water and waste service management;
- educational trials and innovation: the "SUEZ Academy" supports the Group's entities in testing out innovative apprenticeship solutions, with, for instance, the creation of four virtual reality programs in 2019. These innovations can then be disseminated to the entire Group;
- the network of in-house trainers provides its expertise in training programs and technical assistance.

In addition, "iLearn", SUEZ's digital platform, is now integrated into Talent'Up, the Group's HR platform, to offer employees a user-friendly experience with skills development and Career Management tools. In 2019, Group employees logged nearly 238,000 hours of digital training.

In addition to time for training identified as such, it is appropriate to include informal apprenticeship situations that are integrated into the daily working environment. Since 2012, each Group entity accounts for this time as well as the populations benefiting from it, and then transmits this information to the Talents, Management and Culture Department of Human Resources. In 2019, 929,077 training hours (+8.2% compared to 2018) were cataloged by SUEZ entities and are re-usable for informal apprenticeships.

Encouraging internal mobility

In order to achieve its ambitions worldwide, the Group has to rely on employees who can adapt constantly, and who are flexible enough to use their skills wherever they are most useful.

While professional mobility is the key to meeting an activity's requirements with flexibility, it is also a lever of development for employees and a true source of personal enrichment for staff.

The Group encourages mobility by offering employees a particularly abundant and diversified area to build varied, motivating and educational career paths.

To better encourage and organize internal mobility and streamline Career Management for employees, the Group has set up a number of schemes:

- regarding international mobility:
  - a dedicated international mobility team that aims to increase the number of transfers between the Group's various entities and share the knowledge of the pools of employees interested in international mobility,
  - the "Explorer" program, which encourages and increases international mobility by offering employees the opportunity to complete Group assignments abroad that last from a few weeks to a few months (6 months maximum). Through this program, participants gain international experience, grow their network and make a name for themselves. It promotes the transfer of knowledge, know-how and resources and helps increase synergies between Business Units by encouraging discussion and exchanges between the countries,
  - combining our international mobility policy with Group talent development has been the entire focus and purpose of the "Explorer Program". This program was already a resounding success in 2019, with 13 missions completed and 2 additional missions launched in January 2020;
- regarding mobility in France:
  - mobility Committees: these Committees, which meet every two weeks, enable subsidiary HR managers to discuss employees participating in the mobility program and the different positions available, improving their shared knowledge of the businesses and identifying gateways between them,
  - the "#mymobility" system was designed at the end of 2018 to meet the Group's strategic objectives of accelerating the Group's transformation by boosting internal mobility, which promotes better integration and meets our employees' expectations (as expressed in engagement surveys) by providing more personalized support in their projects and career. Therefore, the challenge is to change the mobility culture within the Group by moving from a hiring model where the job opening is the key focus of the process to a real Career Management model where the employee is the key focus of the process, by offering the employee a true "customer experience",
  - "#mymobility" offers a new personalized service that includes a toll-free number employees can call to get information from an employee relations manager or to arrange a meeting with a mobility counselor. In that case, the employee receives professional and personalized support from a dedicated mobility advisor who guides them throughout their process. The advisor helps the employee define their career path and supports them in their mobility, gives them access to an integrated HR network and thus an extensive knowledge of possible opportunities and careers within the Group, regardless of the business, BU or activity,
  - additionally, a platform dedicated to mobility called "#mymobility" helps employees with their mobility plans by guiding them through each essential phase of the mobility process, step by step, and by answering frequently asked questions. All of the tools necessary to move to a different position are available: internal job offers, mobility policy, a how-to guide, testimonials, etc.

Overall, there were a total of 4,047 transfers in 2019, or more than 4% of the total workforce.

A constructive social dialogue

Social dialogue within the Group is based on an information and consultation process overseen by the European Works Council (EWC) and the France Group Works Council (FGWC). With this in mind, the social partners and Group Management meet regularly to exchange viewpoints, negotiate, enter into agreements and ensure their implementation.

Beyond these geographic boundaries, SUEZ is working toward organizing and energizing the employee representative bodies as established by the regulations of local labor law. In 2019, 86% of Group employees were covered by a social dialogue system, either directly within their legal entity connection, or at a more comprehensive level.

Also note that stakeholders are committed to developing innovative social dialogue systems, such as:

- a European Business Observatory that helps identify highly-sought-after skilled professions and up-and-coming professions. To this end, the Group took a closer look at self-driving vehicles in 2019;
- the launch of digital assignments in collaboration with social partners based on Artificial Intelligence, Virtual Reality and robotics;
- awareness raising of sexual harassment, with a pilot session that will be rolled out to the entire Group.

Additionally, as the topic of digital technology is essential for the Group, stakeholders created a joint working Group on Digital Innovation to anticipate and support the digital transformations inherent in the Group's business activities and in the nature of work, which, like other European working groups, meets twice per year. Lastly, the Group and the members of the Committee jointly launched training programs and multi-year missions to develop their expertise as well as their understanding of businesses and the business challenges the Group must overcome. Against this backdrop, a training session on the circular economy was held in 2019 for the European Works Council.

THE EUROPEAN WORKS COUNCIL (EWC)

The European Works Council covers a scope of 12 European countries (France, Germany, Belgium, the Netherlands, Spain, Hungary, Italy, Luxembourg, Poland, the Czech Republic, the United Kingdom and Sweden), representing 60,495 employees.

It is comprised of 28 members from these 12 countries. Its role is to inform and consult on policies and changes in the Group.

This Council met three times in plenary sessions throughout 2019. Furthermore, bi-monthly meetings with the European Works Council Secretariat allow for regular communications by this body regarding Group current events. The Group continued the Employee Relations training cycle so that all incumbent and deputy members of the EWC are trained on labor law mechanisms.

On September 12, 2019, the Group renewed our gender equality agreement, which was negotiated over seven meetings with the EPSU (European Federation of Public Service Unions) and the European trade unions within the Group. Major innovations in this agreement lie in:

- improving working conditions to encourage women to apply for operational jobs (PPE for women, changing rooms for women, etc.);
- combatting sexism and sexual harassment, with the implementation of a whistleblower procedure (protection of victims by the setting up of a counseling center, raising awareness among managers, setting up a point of contact in each BU, and having a zero tolerance policy in this matter);
- developing support for parents (making maternity leave gender neutral in the wage policy, encouraging parents to take parental leave without fear of gender discrimination, and paying the same amount for paternal leave with the same conditions as maternal leave);
- promoting career changes and professional development in professions where a gender is under-represented.

Lastly, several partnership considerations with members of the European Works Council are in progress on the following topics:

- working together to create a Europe-wide survey regarding purchasing power in the Group in line with the Group's compensation and benefits policy. Stakeholders aim to complete this survey in 2020;
- leveraging the experience and expertise that members acquire through carrying out their term of office as a member of the European Works Council, with the goal of developing a professional skills matrix.

THE FRANCE GROUP WORKS COUNCIL (FGWC)

The France Group Works Council covers French companies in which the Group holds over 50% of the share capital. It represents 30,114 employees and comprises 28 members whose role is to provide information on the Group's strategy within its French businesses. In 2019, the Council held two plenary sessions.

The main highlight in terms of employee matters for SUEZ Group in France was signing a Group agreement to harmonize our healthcare plans, which was signed unanimously by employee representative unions within the Group on July 22, 2019. This system is described in the chapter on Health and Safety (section 15.1.5).

Lastly, the Group was one of the French companies that paid the special bonus to bolster purchasing power, which involved 68% of employees in France.

A cutting-edge Talent HRIS

Three years after launching the very first Performance and Development campaign for entities that joined the pilot, the Group's Talent HRIS expanded its scope, in terms of both features and people. At the end of 2019, all the Group's Business Units were added to the scope. Only a few targeted entities still need to receive the functionality.

The Group's Talent HRIS is a comprehensive and integrated HR solution that meets HR-specific needs (talent, recruitment and training) at BU and Group level for a common HR reference framework at the global level. This tool aims to improve and make more consistent the HR process for all employees (HR, managers and employees) as well as the SUEZ Group's operations.

One of the goals of the Talent HRIS was to build a single reference framework for the entire Group, to be used for social reporting and to have better knowledge of our Human Resources. Currently, we have added 80,000 employees (90% of SUEZ employees) from all Business Units, and we use this exact data to analyze, verify and safeguard the Group's Social Report (breakdown by business family, for instance).

This program also aims to encourage internal mobility within all the businesses and Business Units, as well as employee development and training by making everyone more actively involved in their career.

The iLearn tool, the Group's training platform, migrated all the Group's digital content to the Group's new Talent HRIS and made it available to all entities that have the platform. Each entity is gradually integrating its training catalog. Each therefore has access to catalogs of digital training courses and extensive and diverse classroom training.

Thanks to the collection of feedback, the classification of requests and the overseeing of priority improvements managed by business experts identified in each business unit, we are continuously improving the user experience on all modules (Learning, Recruitment, Performance, Development and Succession) so the tool corresponds to the different SUEZ Group entities' needs as best it can.

Most SUEZ employees have adapted quickly to this new HRIS. At the same time, a Talent HRIS community was created on Yammer. This space brings together all SUEZ employees and is intended to be a space to share best practices and innovations, and to centralize all communications on the tool and the program.

15.1.4 Inclusion and Diversity

At SUEZ Group, we are committed to promoting Inclusion and Diversity in our policy and we are implementing shared action plans for all our Regions and Business Units.

Fundamental principles of the Diversity policy

These principles are shared by all SUEZ entities – both in France and abroad – to guarantee an inclusive working environment for all employees.

They include:

► **Promoting an Inclusive Culture**

Every employee is different. We encourage and value these differences – be they visible or invisible, be they in gender, age, culture, health, physical condition, sexual orientation, etc. – and we promise to provide a working environment in which every employee is respected as an individual and can blossom.

SUEZ embodies this inclusive Culture and is creating more efficient teams to deliver better results for the Company and our customers.

► **Increase diversity and gender equality**

SUEZ has adopted a Roadmap dedicated to diversity, with established quantified targets common to all Group companies: reach 25% women in the Group and 33% women in management by 2022.

In 2019, the Group also signed a European agreement on equality in the workplace with representatives from European trade union federations. Outside Europe, SUEZ decided to invite all our entities to automatically apply the principles and directives of this agreement in all the countries where the Group operates, without violating local laws.

Each of these two fundamental principles of Inclusion and Diversity have a dedicated action plan shared with all Group entities.

Action programs

► **Our actions to promote an Inclusive Culture**

SUEZ promises an inclusive Culture through a set of awareness raising and communication initiatives:

- communication campaigns disseminated at Group level for International Women's Day and International Disability Day,
- e-learning track: launch of the first two "SUEZ Inclusion & Diversity" modules: educational video on stereotypes, "Is this discrimination or not?" quiz,
- topic-specific webinar meetings: "Including and promoting young women at SUEZ", "Including disabled workers"; all employees are invited to join webinars, which are broadcast in the Group's three official languages (French, English and Spanish). Business Units' best practices are also presented there to help share and replicate these.

In addition to the actions taken by the Group, each of the Group's Business Units has set up specific initiatives depending on local priorities.

For example:

- Australia defined an inclusion action plan for indigenous people in the company and every year celebrates Harmony Day by honoring all the different ethnicities in the company,
- France signed its 5th Disability Agreement.

► **Our Roadmap to increase diversity and gender equality**

By adopting a Roadmap dedicated to gender equality, SUEZ is putting in place a range of ambitious actions to progress from making commitments to delivering results.

In 2019:

- SUEZ's Executive Committee has 4 women out of 11 members,
- 22.2% of the workforce are women,
- 23.6% of executives (Topex) are women,
- 28.2% of management positions are held by women,
- 45% of the 1,400 Talents identified *via* the People Review process are women.

Several levers were activated simultaneously to increase the number of women among our workforce and to grow our talent pools:

- **Attract more candidates**
  In 2019, 33.7% of new manager hires under permanent contracts were women, which explains the increase in the proportion of women in this category (from 27.6% at the end of 2018 to 28.2% at the end of 2019).
  SUEZ is committed to continue stepping up the hiring of women *via* the following actions:
  - having at least one woman in the lists of candidate finalists,
  - paying special attention to job descriptions (non-sexist writing that is appealing to women, encouraging women to apply for technical jobs),
  - working on our employer brand and communicating about Equal Opportunities (*e.g.* funding a video promoting engineering studies for women, Campaign for increasing women truck drivers –video).
- **Create a women-friendly working environment**
  Continue initiatives to improve the level of well-being for women working at SUEZ:
  - encourage flexibility and women-friendly working conditions, such as providing safety equipment that will fit women and implementing agreements on working remotely,
  - develop the SUEZ women's network and other sharing initiatives. In 2019, more than 3,000 women were members of a SUEZ network of women in the Regions.
- **Reduce wage gaps**
  For the first time in 2019, a comprehensive study on this subject was conducted and presented to the CSR, Innovation, Ethics, Water and Sustainable Planet Committee. This study enabled the Group to define a shared methodology for analyzing all the Business Units and objectify pay gaps between male and female managers (around 17,000). In particular, gaps related to the breakdown by level of responsibility

(grades) were calculated, which enable us to quantify the "glass ceiling" effect.

All the results of this study have been presented to each of the HR Departments of the countries and BUs to help them take better account of these issues in the compensation policies.

In France, after requiring companies to publish a gender equality index, on March 1, 2019 SUEZ published our first indices for our French entities with at least 1,000 employees, then on September 1, indices for entities with workforces of between 250 and 999 employees. Overall, these publications involve nearly 19,000 employees, or 63% of the Group's workforce in France, and they show a global index of 84 out of 100 (weighted calculation according to the workforce of the entities). In detail, none of the 14 individual indices published were less than 75 out of 100, the threshold under which a three-year period of time is given to implement appropriate corrective measures for compliance and to correct the pay gaps between men and women to obtain a result greater than or equal to 75. The Group believes that, although we can still improve, in particular *via* the action plans in progress, this result is the product of an active gender equality policy that has been in place for several years.

Hiring and promoting more women to senior positions are essential ways to reduce pay gaps related to breakdown per level of responsibility.

– Promote
In order to accelerate the careers of women, in 2019 dedicated People Reviews for women were conducted in each Group entity to identify individual development programs and accelerate their promotion to key positions.
The Group also pays close attention to women in the talent management process (45% of talents are women).

– Increase
The Group is continuing to increase the number of women coached or mentored and is working to open up additional career opportunities for women.

– Transform culture through communication
In order to change mentalities about women in the workplace, we need to:
  – break down stereotypes and unconscious biases: to do this, a Sexism in the Workplace Guide has been prepared and circulated. This guide, translated into English and Spanish, helps employees understand different forms of sexism and their impact in hiring, career development and work organization,
  – strengthen social dialogue: SUEZ signed a European agreement on gender equality (with commitments regarding parental leave, combating sexism and sexual harassment, and promoting women to top management),
  – promote initiatives in favor of women's rights: International Women's Day, an anti-sexism campaign, increase the number of testimonials by women holding leadership roles, etc. Talk about these subjects, exchange views with women's networks including men.

LABELS AND CERTIFICATIONS IN FRANCE

► **Top Employer**

SUEZ has received the Top Employer certification in France for the sixth year in a row. This certification recognizes the quality of the Group's Human Resources policy: HR policies and practices and employee working conditions.

The certification verifies nine major HR subjects: talent management strategy; workforce planning; performance management; training and development; inclusion; leadership development; career and succession management; compensation and employee benefits; corporate culture.

These subjects were analyzed across entities according to five focus areas: strategy and policy; involvement of General Management; practices; measurements/assessment of practices; tech support (specific software).

For the 2019 certification, SUEZ obtained an overall score of 77% (80% in 2018) and demonstrated improvements in the areas of talent management, training and development, leadership development and Career Management.

The certification strengthens the Group's brand as an employer, contributes to HR development and innovation through benchmark and analysis reports and opens up the opportunity for meetings and discussions on HR best practices with other Top Employers.

Units dedicated to insertion in France

ROLE OF THE SUEZ SOCIAL INNOVATION DEPARTMENT

The Social Innovation Department aims to make the SUEZ Group a committed player in developing job opportunities for all and supporting the emergence of new local economies (social, collaborative, circular) in favor of ecological transition.

The role of the Social Innovation Department is to "make employment and the circular economy come together" in the regions where SUEZ operates by increasing collaboration with local players.

In concrete terms, the Social Innovation Department brings together, combines and organizes the Group's expertise in social insertion and innovation to support the needs of the BUs as much as possible, and particularly as that relates to:

- responding to the social aspect of calls for tenders (with or without insertion clauses) to make social innovation a way to set the Group apart. In 2019, more than 1.6 million hours of insertion were offered in France in our calls for tenders;
- diversifying their hiring channels and opening jobs up to people excluded from the workforce;
- forming partnerships with the world of social insertion and social economy organizations, and developing new "social business" solutions, which drive job creation and are complementary to SUEZ's businesses. More than 1,000 reintegrated employees work every year in the markets that SUEZ entrusts to firms providing jobs for the unemployed in France;
- mobilizing the Group's insertion tools ("Rebond Insertion", "ValPlus") and identifying the right partners;

- developing entrepreneurial programs (incubators dedicated to job seekers) and intrapreneurial programs (with employee-entrepreneurs). 127 job seekers were supported in 2019 in creating their companies by *Maison pour Rebondir* Ile-de-France and *Maison pour Rebondir* Bordeaux, supported by SUEZ;
- employee social commitment.

STRUCTURE OF THE SOCIAL INNOVATION DEPARTMENT

The Social Innovation Department relies on the following resources:

- 1 The *Maison pour Rebondir* in Bordeaux, to set up projects in "test & learn" mode;
- 5 *Maison pour Rebondir* satellite offices (West Ile-de-France, South Ile-de-France, Lyon, Dijon, Bordeaux), which operate as "SUEZ inclusion hubs" and 2 *J'Entreprends* incubators;
- 4 support divisions to support the roll-out of services to the BUs and HR, sales and purchasing functions;
- subsidiary inclusion operators (Rebond Insertion and ValPlus) and key partners (Ares, ID'EES, Vitamine T, etc.).

EXAMPLES OF REPRESENTATIVE SOCIAL INNOVATION PROJECTS SUPPORTED BY SUEZ

Rebond Insertion

In 2003, SUEZ created Rebond Insertion, a wholly-owned subsidiary and R&R France company focused on rehiring and integration that historically offers two services:

- sorting activities subcontracted from SUEZ R&R at sorting centers in Issy-les-Moulineaux, Poitiers, Vedène, and Jas de Rhodes;
- temporary integration, with temporary employment agencies specialized in integration in Paris, Reims and Nice, which make staff available for integration on a temporary basis.

In 2019, more than 554 newly integrated people were supported, enabling 79% to leave the program with a job or in qualification-earning training.

The HOPE project promoting the integration of refugees

In partnership with the OFII (French Office of Immigration and Integration), the OPCALIA and AFPA (Association for the Professional Training of Adults), at the end of 2018, SUEZ became involved with the HOPE program, which helps refugees find employment and gain autonomy.

The goal of the HOPE program is to offer them training in highly-sought-after skilled professions where companies lack skilled labor.

As a result, SUEZ is training a class of 12 refugees as truck drivers for our Recycling and Recovery agencies in France (9 candidates in Ile-de-France and 3 candidates in Dijon). Rebond Insertion's teams provide social and professional assistance.

SUEZ's commitment under the PAQTE and *"La France une Chance"*

SUEZ has been involved since 2018 in PAQTE *(Pacte Avec les Quartiers pour Toutes les Entreprises)*, offered by the Government. The goal is to help combat social and professional exclusion that many people from priority neighborhoods face. As a result, SUEZ has partnered with *"Tous en Stage"* to help in 2019, 632 junior high school students from REP+ middle schools (middle schools in priority neighborhoods) to take group training courses at our sites and discover environmental activities. SUEZ has also started developing "inclusive part-time learning", increasing from 3% part-time learning contracts from priority neighborhoods in 2018 to more than 7% in 2019. Lastly, purchasing departments are encouraged to develop social subcontracting by entrusting contracts to entrepreneurs from underprivileged neighborhoods or to integration organizations. At the same time, more than 12 PAQTE and *"La France une Chance"* agreements have been signed by regional SUEZ subsidiaries.

15.1.5 Health and Safety – Quality of life in the workplace

Protecting the Health and Safety of employees, subcontractors and third parties is one of the major non-financial challenges identified, especially with regard to promoting human rights in the value chain of the Group's operations. This issue is included in our Vigilance Plan (see chapter 5.9 of this Universal Registration Document – Non-financial performance statement).

15.1.5.1 Health and Safety policy and governance

A NEW POLICY

To revitalize the Health and Safety process and to be consistent with the Shaping SUEZ 2030 corporate vision, which has inspired the entire company, the new Chief Executive Officer of SUEZ has reviewed and signed SUEZ's Health and Safety policy.

This policy aims to meet the "Zero serious and fatal accident" goal, create a fair and inclusive Health and Safety culture and inspire employees to care more about everyone's well-being. Three areas of work will guide our initiatives and motivate teams:

- control the major risks to protect health and life;
- make Health and Safety a key factor in decision-making;
- commit to Health and Safety individually and collectively.

Getting everyone involved in making improvements to prevent Health and Safety risks, while ensuring and improving workplace well-being, is a key factor of SUEZ's performance. It also gives meaning to our Respect value: "**Each and every employee cares about the safety and well-being of all**, acts ethically and with integrity, respects diversity and takes action to reduce inequality".

Personal commitment by Management at every level: Group, Business Units, regions, entities, etc. helps us effectively roll out the Group's policy. This commitment is illustrated by the involvement of SUEZ's Chief Executive Officer and the Executive Committee in monitoring the "Ten Rules that Save Lives" and rolling out the "Fair Culture", analyzing fatal accidents, deciding to have Health and Safety managers report directly to the highest level in the Business Units' organizations, and by emphasizing the subject in performance reviews at all levels of the organization. Operational managers and operators are also supported by a network of approximately 900 Health and Safety professionals. The employee survey, conducted in July 2019 as part of the Shaping SUEZ 2030 strategic plan, also highlighted how much people think about safety and how well safety procedures are rolled out throughout the Company. The survey confirmed the results of the global engagement survey from May 2018: more than 80% of employees had a positive opinion of the Group's Health and Safety approach.

This policy and related initiatives were then implemented and managed by a Group-wide process that includes formalizing each subsidiary's objectives through annual contracts signed by the Chief Executive Officer, the Health and Safety function and Human Resources, implementing a Health and Safety audit program, offering management training and monitoring by the Health and Safety Department using proactive performance indicators.

ACTION PLAN AND HEALTH AND SAFETY CONTRACTS

The Group's action plan is prepared by the Health and Safety Department and its network, discussed in the Performance Management Committee and in the Health and Safety and Human Resources Steering Committees, then presented to the Board of Directors' CSR, Ethics, Innovation, Water and Sustainable Planet Committee. It is then distributed to all the Group's operational subsidiaries *via* an annual Health and Safety Contract.

These **"Health and Safety Objectives Contracts"** are a particularly structured and efficient system that SUEZ has had in effect for four years. Not only does their roll-out align with corporate objectives, but they also motivate the entire company. The "Health and Safety Objectives Contract" is established with the management of each subsidiary at the beginning of the year and is signed with the Group Health and Safety Department. Points of contact in the Corporate Health and Safety team follow through on this contract throughout the year, then at the end of the year, they perform an in-depth review to ensure actions have been implemented and targets achieved. Its consistent roll-out is included in the scorecards, which significantly impact the variable portion of pay for all Executive Committee members (multiplying factor of 0.8 to 1.2 of the total bonus) and more broadly, for managers of the Company. The way SUEZ calculates the variable portion of the new Chief Executive Officer's compensation was also revised in 2019 to make Health and Safety performance an even larger factor. In 2019, a specific contract was drawn up for the new WTS business unit as part of its integration.

These contracts include both quantitative (FR and SR) as well as qualitative criteria, with 10 annual key topics that include specific targets to increase prevention and the Health and Safety culture. They insist on rolling out "Fair Culture" throughout the Company, on Health and Safety Management training, oversight of major risks (with consideration of each entity's specific situation) and certain operational methods and risk management methods, and of course include actions regarding employee health. At the end of 2019, this operational subsidiaries system was supplemented by Health and Safety objectives set for each of the headquarters' functional departments, so each contributes to the project in their area (innovation, knowledge management, compensation & benefits, purchasing, investments, etc.).

At SUEZ, we want to place Health and Safety along with workplace well-being at the heart of what we do and who we are as a company. That is why, when the Shaping SUEZ 2030 plan was created, the Health and Safety network partnered with managers, employees and social partners to analyze and formalize a new Roadmap for 2020-2023, along with a course for 2030. This Health and Safety Roadmap will be an extension of the 2017-2021 Roadmap. The 2020 objectives contracts have been amended accordingly, as have the underlying actions of SUEZ's Health and Safety team.

AUDIT MEASURES AND PROACTIVE INDICATORS

Each subsidiary implements its own system to verify and audit if its actions are effective and compliant, whether it is specifically certified in Health and Safety or not. For instance, in France, the main Recycling and Recovery BU sites underwent an assessment using a 100-question matrix focusing on health, safety, environment and industrial risks. More than 800 sites were assessed in 2018 and 2019.

Regarding the Health and Safety Department's audit program, 11 Health and Safety audits were carried out in 2019 to assess the level of maturity of the Health and Safety Management system and the level of control of Major Risks within the subsidiaries. These audits are based on a Group reference framework that has been established gradually over the course of some ten years' continuous effort. This reference framework applies when local regulations do not exist or fall short of the Group's standards. The results of these audits show an increase in management leadership relating to Health and Safety, a more competent Health and Safety sector, a more clear-cut definition of roles and responsibilities, improved skills on managing major risks and more employee representative involvement. These audits also assessed the progress of action plans that were developed as a follow up to three out of four of the Group's fatal accidents in 2018.

Lastly, in 2018, the Health and Safety Department set up proactive performance indicators on top of existing reactive audits and indicators (frequency rate, FR and severity rate, SR) to assess the subsidiaries' level of maturity with regard to their safety culture, and in particular, experience acquired from analyzing accidents and near accidents, and especially events with high potential severity, which undergo an in-depth debriefing, discussions on best practices as well as managers' visible engagement through management safety visits.

15.1.5.2 Major initiatives

ROLLING OUT A FAIR AND INCLUSIVE CULTURE WITH HIGH-QUALITY SOCIAL DIALOGUE

One of the priority focus areas is implementing a "Fair Culture" for all of our business activities around the world. Launched in 2015, the Group's "Fair Culture" policy and its three pillars (recognizing and sharing best practices, reporting "near accidents" and dangerous situations, and applying customized disciplinary measures when rules and procedures are not followed), underwent a self-assessment within each of our entities at the end of 2016. 2019 was the third year that actions to develop all three pillars and build a true "fair and balanced safety culture" were implemented across the Group, which must be done long-term. In 2019, most BUs rolled out surveys to employees and managers to establish their expectations as well as how well the "Fair Culture" policy has been implemented. Their perception of the policy demonstrates the progress the policy has made. BUs that have not yet rolled out the survey will do so in 2020. Additionally, the Health and Safety Department is working with all entities on reporting near accidents and events with high potential severity (HIPO) with the goal of implementing corrective and proactive actions and preventing serious or fatal accidents.

These surveys help motivate everyone. To help the Group's safety culture take root, the Group organizes an international Health and Safety week. To really drive engagement, in 2019, Health and Safety took the spotlight for the entire month of April. The Group rolled out several important themes: Vigiminute, a procedure asking employees to take a step back before jumping into a situation, the ability to stop interventions, management visits and the HIPOs.

A sweeping management training and mobilization plan has been rolled out over the past two years, which has made management more committed and motivated. Of particular relevance is the sharp increase in the chain of command's involvement in risk prevention by conducting regular Health and Safety Management visits at all sites, following up on corrective actions identified, sharing HIPOs and monitoring proactive indicators. Conducting these Health and Safety Management visits falls in line with the Group's Fair Culture mindset (recognizing best practices, reporting deviations and following up on corrective actions). The Group successfully increased visible engagement by management in all Business Units by substantially increasing site visits and sharing best practices.

Social partners are heavily involved and have been driving forces in the Health and Safety area, be they in the field at subsidiaries, in the local authorities or within the Group's bodies (France Group Committee and European Works Council). There is also a European Task Force dedicated to Health and Safety from the European Works Council. This meets twice a year. In 2019, in addition to discussions on the Roadmap, results, fatal accidents and best practices, the working group contributed to the Shaping SUEZ 2030 Health and Safety diagnostic by positioning SUEZ's maturity with regard to various levers of change. In addition, concrete actions such as actions to prevent road-related risks, PPE, or managing isolated workers were specifically discussed.

Locally, interviews of union representatives from international entities such as Lydec in Morocco or SEAAL in Algeria are emphasizing how much they appreciate this policy: *"employee working conditions have improved thanks to the dialogue. I'd like to mention the Health and Safety policy especially, which is a major challenge, but we have made a great deal of progress on it"*. The figures show progress. On a contract like Lydec in Casablanca, they had 220 accidents with sick leave per year on average at the beginning of the contract but reduced these to 20 per year after 10 years under the contract, and now have less than 5 per year! This operational excellence was rewarded by the Moroccan Ministry of Labor on April 13, 2019, during the International Preventica trade show in Morocco, with an award for being a responsible company committed to promoting a culture of prevention in Morocco. It was the energy with which SUEZ encourages subcontractors and citizens that was rewarded.

Other stakeholders are also included. Discussions on safety take place with customers, of course, and particularly manufacturers, which have high expectations when SUEZ teams work within their sites. The Group shares best practices with each other on a regular basis, either in the field or at headquarters.

CONTROLLING MAJOR SAFETY RISKS

Preventing serious and fatal accidents requires adhering to the "Rules that Save Lives", managing and controlling the major risks, and learning from all the dangerous events and situations reported from the field. Today, "Rules that Save Lives" apply to both the Group's employees as well as the subcontractors working on-site or at customers' sites. These ten rules implemented in both the Water and Recycling and Recovery business in 2013 stem from the analysis of serious and fatal accidents that the Group has experienced over the past ten years. A major effort to raise our staff's commitment is serving as an impetus for managers and operators in all countries in which the Group operates to strictly adhere to the ten "Rules that Save Lives". The Group also includes its subcontractors and partners in this process. This component forms part of every new entity's plan or contract won, and it was rolled out efficiently in the new WTS business unit. In 2019, 14,120 participations of WTS employees in "Life Saving Rules Commitment meetings" took place to guarantee that these rules are adopted locally.

In 2016, the Group developed a new approach to major risk oversight with a "Zero serious and fatal accident" ambition. The work began with pedestrian-vehicle collision risk at the sites. The initiative, which was initially launched for the Recycling and Recovery (R&R) business activities in Europe, was expanded to all the Group's business activities across the world in 2017. The first course of action is to indicate and organize access to "Restricted Access Areas" (ZARs) on the sites. These ZARs are areas on the sites that have a proven higher risk for pedestrians due to a constant or near-constant presence of moving vehicles. A set of technical, organizational and human measures are then taken to strictly control access to these areas to make them safer. The ZAR initiative resulted in an audit being launched of all the Group's R&R activities in 2018, and then a follow-up audit was launched in 2019. Lastly, in accordance with the commitments in the Sustainable Development Roadmap established at Group level, a monitoring indicator for the zones placed under supervision has been established. We have come a long way: out of more than 1,600 priority ZARs listed at SUEZ, 78% now have technical, organizational and human measures put in place at the end of 2019.

In 2018 and 2019, in addition to the continued roll-out of the ZAR system, all subsidiaries in the R&R sector were asked to focus on the risk of pedestrian-vehicle collisions outside the sites, subsidiaries in the water sector were asked to improve working at heights and the two businesses were asked to work on the issue of lockouts/shut-offs (for electrical, mechanical, pneumatic and hydraulic systems, etc.), by sharing best practices. In addition, the attention paid to the quality of trench shoring remains a major concern with regard to the subcontractors, especially in countries where local on-the-job safety requirements are not as stringent as the Group's rules. On water treatment sites, we will continue to rigorously monitor the gaseous chlorine risk to employees and persons living in the vicinity of our plants. Serious accidents primarily involved collisions between collection trucks and pedestrians (third parties). Managing this collision risk remains the priority in 2019 with a focus on human and organizational factors in collection operations, road safety training for truck drivers, and installing digital tools to help the drivers better manage road risks and avoid fatal accidents. In 2019, the Group created virtual reality training modules for driving waste collection vehicles and appropriate behavior in ZARs, which are currently being rolled out after receiving strong approval from operators at the initial sites, in addition to the modules for electrical system lock-outs/shut-offs created in 2018.

For the Group, an integrated safety culture that controls risks well is based on three pillars: human and organizational factors, the technical aspect of safety, and safety management systems. The technical aspect and safety management systems are integrated into the Business Units. The subsidiaries also reviewed their management systems while progressively undergoing ISO 45001 certifications. The percentage of employees covered by a dedicated safety certification continues to grow. Outside France, SUEZ is continuing to increase cover for overseas employees, reaching 52% at the end of 2019. Note also that as part of our increased work on road-related risk, a first entity (Middle East) certified its business under ISO 39001 (for road traffic safety management) and a second one (R&R Morocco) is set to obtain it in early 2020. These measures made significant progress on the three pillars on road-related risk. The Group therefore created an audit matrix based on this standard and our internal reference framework, and a first entity (R&R Belgium) was audited in 2019.

STRONGER HEALTH AND QUALITY OF LIFE IN THE WORKPLACE MEASURES

The Group applies this same approach to controlling its health risks. In 2016 and 2017, the subsidiaries conducted a comprehensive review of preventative and protective measures for their major health risks. This ambitious work identified areas for improvement that then enabled the Health and Safety Department to review Group requirements in this area and make them more stringent. In 2018, the subsidiaries' mission was to start to implement effective management and control systems for their priority health risks. Half of the subsidiaries (Africa, the Middle East, Belgium, the WTS BU, etc.) focused on chemical risks with training measures, protection measures or replacing the most hazardous products. Other topics were covered, such as preventing musculoskeletal disorders (MSDs) at the R&R sorting centers in France, and putting together a process to prevent and control psychoactive risks (drugs and alcohol) in several entities in France and abroad. At R&R France, Internal Regulations have been changed to enhance systematic checks. The company defined operational methods, standardized testers and more than 2,600 employees were tested. In Sweden, vehicles have been equipped with breathalyzers to start the engine. At the end of 2019, priority action plans that were audited as part of the Health and Safety objectives contracts have made good progress, and the subsidiaries should continue their initiatives on new Health risks.

In France, SUEZ continued a national cardiovascular risk screening campaign throughout 2019. This initiative, rolled out first in the Paris area in 2018 with the participation of volunteer employees, aims to encourage well-being, promote healthy lifestyles and spread innovative health measures within the Company. At the end of 2019, nearly 1,500 employees participated, and the initiative is set to continue in 2020.

In 2019, SUEZ finished harmonizing health mutual funds for 24,000 French employees. It includes most of the best coverage from the current plans and has additional benefits, including: new hospital coverage fully paid for by SUEZ, funeral coverage fully paid for by the employer, the possibility to pay for additional coverage for a few more euros, which covers specialist fee surcharges, and lastly integrated social action is optional to all the companies in the plan so that exceptional assistance can be provided to employees and their families if they experience financial hardship. This initiative won a C&B trophy in 2019 (RH&M Group).

Following the engagement survey in 2018, numerous initiatives were taken to make progress on various aspects contributing to employee well-being, and particularly in teams where the results were the lowest: improving working conditions (such as designing breakrooms, improving air conditioning in some buildings and vehicles, etc.), recognizing employees for their commitment to Health and Safety, organizing work socials and strengthening social relationships, improving provisions for work-life balance (such as flex-work through working remotely or flexible working hours, increasing digital tools for working remotely and collaborating, etc.), raising awareness about stress management among 1,500 managers during Health and Safety training, and continuing training on de-escalation techniques. SUEZ rolled out other cross-entity measures in 2019, such as holding enhanced ethics and inter-cultural training (to make it easier to discuss things and understand one another), rolling out the HRIS to improve employee visibility and enhance annual performance reviews and the People Reviews process, launching the large anti-sexism campaign and the major communication on strategy during the Shaping SUEZ 2030 project to make it meaningful and visible: all these factors are contributing to SUEZ's well-being measures.

The results and best practices of France, Spain and England, where regulations support well-being and more thorough psychosocial risk management measures, were shared with all Group entities *via* webinar at the end of 2019. Some countries, like India and Brazil, started to adapt and roll out the Group's best practices in this area, regardless of non-existent local regulations.

As a result, in the Water France business unit, the signature precursor of a very comprehensive "Quality of Life in the Workplace" agreement, which won the Social Dialogue Trophy in 2018 (6th Annual Awards ceremony by RH&M Group), allowed us to make real progress as a result of a comprehensive approach based on a structured action plan and a network of QLW points of contact throughout France. The goal is to motivate employees to boost the Company's performance. We do this through five levers, with actions on: developing remote working, raising awareness of work-life balance (right to disconnect), making internal films on topics like QLW, hands-on workshops on getting along, management training, etc. In England, a "Wellness for All" charter with eight priority areas of work was signed in July 2019 after a long collaborative process involving employees and social partners. This is the case in Australia as well.

Lastly, SUEZ Group also launched a World Health Day for the first time on November 21, 2019, in addition to Safety Month, which took place in April 2019. Topics covered concerned healthy lifestyles with a focus on nutrition, rest and physical activity. The Group will be replicating this impactful day in the coming years and covering new challenges (addiction, occupational health risks, etc.).

MANAGEMENT OF SUBCONTRACTORS AND TEMPORARY WORKERS

Health and Safety requirements and support concern subcontractors and temporary workers. Our procedures require their selection, orientation, support and assessment to include strict Health and Safety criteria. Regular meetings take place so we can all improve. In 2019, in line with the Group's Vigilance Plan, the Group made significant efforts mapping subcontractors to assess the most at-risk subcontractors according to country and business, and prioritizing our actions.

As part of our construction operations, SUEZ pays very close attention to who we choose for local and international partners and/or subcontractors, by ensuring:

- their qualifications/certifications if they are not already in SUEZ's list of partners/subcontractors, based on criteria defined and reviewed regularly;

- they are supervised throughout the project to verify they comply with local regulations as well as SUEZ's rules and standards. This supervision is performed by Health and Safety teams *via* regular worksite visits or audit programs as well as by any person in the Group or the "Treatment & Infrastructure" team's Center for Construction Expertise. All SUEZ staff are regularly trained and made aware of specific risks. At SUEZ, "We care about safety everywhere, all the time, with and for everyone";
- an overall service assessment is conducted at the end of a construction project to determine the general level of service in terms of Health and Safety, to be able to take advantage of feedback and share it with the subcontractor so he can make Health and Safety improvements;
- additional attention, beyond monitoring premises and worksites, is given to employees of subcontractors that live in large-scale site accommodation next to worksites (particularly in Africa, India and the Middle East) and living conditions are monitored at these sites. An audit matrix of such site accommodation was created and rolled out over 2018 and 2019, with each subject to monitoring by Health and Safety, Human Resources, purchasing and operations teams. The improvements were significant.

In the Water France BU, training for managers and buyers in how to manage third-party companies' Health and Safety practices was rolled out in 2018 and 2019 with nearly 600 people trained. A recertification process for subcontractors working on the networks was initiated in 2019 with initial results showing a 30% reduction in the pool of subcontractors, due to stricter business and Health and Safety requirements. Certain companies went through a specific support process.

In Poland in 2019, meetings were organized with the main subcontractors to both transmit the SUEZ Health and Safety requirements, and also to obtain a complete picture with regard to the service providers. The entity also conducted audits as well as safety role-playing visits on its sites. A standard for managing external companies has been written and communicated to subcontractors.

In Lydec, in Morocco, our very high level of maturity with regard to subcontractor management was recognized by the Moroccan Minister of Labor with an award for being a responsible company committed to promoting a culture of prevention in Morocco on April 13, 2019, during the International Preventica trade show. The year 2019 was dedicated to overhauling the reference framework for assessing subcontractors, to better take into account Duty of Vigilance requirements with stricter verification of employment, Health and Safety obligations of service providers as well as requirements related to anti-corruption and prevention measures, which Lydec was certified for under ISO 37001 in December 2018.

Regarding temporary workers, 2019 was characterized by the finalization of the call for tenders aiming to obtain a global offer with more limited partners selected also by taking into account the Health and Safety requirements. The Group is now able to regularly and precisely monitor frequency and severity rates of temporary staff, and any progress made in the various countries, in a more consistent way. Temporary Staffing Company Health and Safety networks are at the disposal of the Group to locally support the BUs in analyzing risks and improving their areas deemed critical.

TRAINING OF OPERATIONAL PERSONNEL & PROFESSIONALIZING THE HEALTH AND SAFETY FUNCTION

In 2019, 44.4% of the total number of training hours were dedicated to Quality, Safety and Environment (QSE), a big improvement.

The training cycle for all managers in "Health and Safety Leadership" ended in 2019. Nearly 1,500 managers were trained, with 320 new managers trained in 2019. This maturity enabled SUEZ to update a new cycle by giving managers who had not received training in three years an updated e-learning course covering various concepts. Nearly 200 managers took this module in 2019. A course is also set up for field management both in France and abroad. This training equips managers with approaches and tools to more effectively implement the Group's Health and Safety policy. The Health and Safety Academy, created at the end of 2017, has been managing the roll-out of these training sessions.

In order to take account of serious accidents related to violations of the rules, and in particular of our rules that save lives, the Group has worked more since 2018 on human and organizational factors and has continued our efforts in 2019 to better integrate these concepts into the core of its activities. New innovative and strategic training sessions were released in 2018 and 2019. Notably, there is the "Leadership Influence" training in the Health and Safety field, the Virtual Reality training sessions, as well as the COOC training (interactive apprenticeship) on Human and Organizational Factors and Safety Culture. Major roll-out of this course, developed in late 2018 with ICSI (Institute for an Industrial Safety Culture), has begun on a massive scale. The goal is to train the main managers and actors and, of course, the Health and Safety departments in less than three years. Nearly 430 people were trained in 2019. This process will continue in 2020 and 2021.

In Virtual Reality, four key modules are now available (risk hunting, driving a waste collection vehicle, electrical shut-off/lockouts, pedestrian/vehicle traffic (ZAR)). Technical tools enabling the Group to monitor the modules will be rolled out to all the BUs in 2020.

In addition to training, throughout 2019, SUEZ rolled out a process to define key expertise and make an inventory of the network to obtain a more comprehensive global mapping of experts or potential experts, and roll out development and sharing initiatives. To increase sharing within the network, the Group's Health and Safety team creates tools: SharePoint or Reference Document, the Yammer group to share best practices and momentum, or, new in 2019, organizing regular Webinars on Health and Safety topics for the entire network (and for employees who want to participate).

MONITORING AND INNOVATION SYSTEM

SUEZ also wants to make progress in Health and Safety using exciting innovation, as new technologies can reduce risks and harsh working conditions. These innovations are local at the subsidiary or led in a more structured way in SUEZ's Centers for Research and Innovation. Incidentally, one of the eight categories of SUEZ's "Innovation Awards" is a category that specifically concerns Health and Safety challenges.

For instance, in the Research Center in Bordeaux, robotic and cobotic solutions are studied because they offer a promising outlook for improving working conditions and worker protection. As a result, in 2019, exoskeleton usability tests were conducted at the Water France BU.

CIRSEE (SUEZ's International Environmental and Water Research Center) located in Le Pecq-Croissy hosts an Environment and Health Department that conducts scientific monitoring on how health risks can affect all of SUEZ's businesses and their impact on employees, local residents or consumers. The center conducts studies and research to help anticipate, assess and control risks. This Environment & Health Department relies on two bodies to define its work priorities:

- a "Health Environment" Steering Committee consisting of internal experts and the relevant SUEZ Departments (Technical Departments, Health and Safety, Industrial Risks, Research and Innovation);
- a Scientific Committee comprising external experts from around the world who meet once a year in Cannes for an international "Water and Health" seminar, during which they award the SUEZ "Water and Health" prize to a young researcher.

Research work has been conducted on assessing and managing risks related to dust, particles and bioaerosols (bacterial endotoxins, molds, and mycotoxins) in waste management operations. The results were highlighted at conferences, including at the INRS in 2018 and in peer-reviewed international scientific journals (*Waste Management*, *Détritus Journal*, etc.) to share with the entire industry and more widely.

Note that SUEZ is represented within the AFNOR standards commission "Workplace atmosphere – Assessment of exposure to chemical and biological agents at the workplace – X43 C" and its group of "Bioaerosol" experts, as well as on the Board of Directors and in the Policy Committees of the French Agency for Food, Environmental and Occupational Health and Safety (ANSES).

15.1.5.3 Results

Since 2010, frequency rates for accidents with sick leave continue to drop, and have even been halved in 10 years. In 2019, the trend continued in a major way, with a 15% reduction compared to 2018, or a FR of 6.94, corresponding to nearly 200 fewer accidents with sick leave. The severity rate also followed a steady decline, confirmed in 2019 with a SR of 0.39.

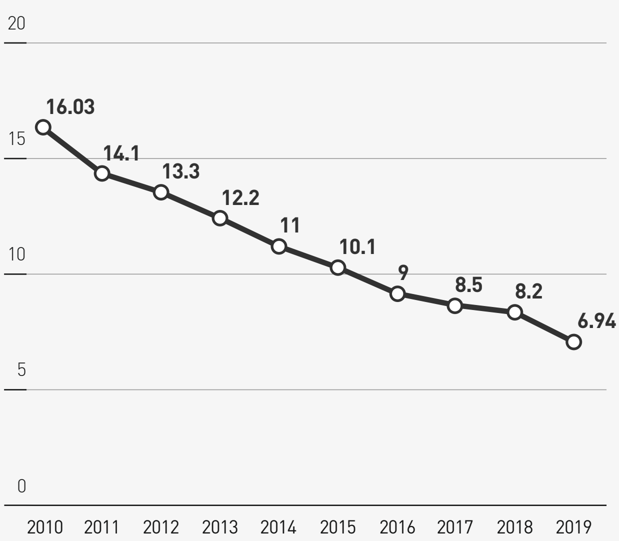
This improvement has continued, placing SUEZ Group among the highest performing companies in its industry in terms of Health and Safety today, according to benchmarks. At the end of 2019, ANSES for instance, published a report indicating 59 work-related accidents per 1,000 people in the waste industry and 33.8 accidents per 1,000 people, all sectors combined. At SUEZ France, in 2019, it was 27 accidents per 1,000 employees.

The frequency rate for subcontractors in the construction and infrastructure business, a sector identified as particularly at-risk, especially at worksites abroad (Sri Lanka, Bangladesh, Africa, etc.) is now managed and was at 2.96 in 2019.

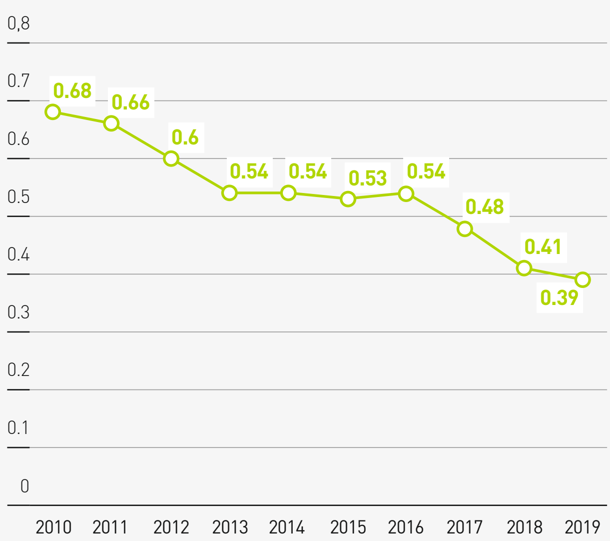
The number of fatalities related to the business out of all the people working for the Group (employees, temporary workers, interns and part-time learning students) was two in 2019: one employee in India who died from a gas canister explosion while a supplier was handling it, and one employee sweeper in Tangier (Morocco), struck by a taxi driver who lost control of his vehicle. Note also that an employee of a subcontractor drowned in Chile.

In terms of health, the number of new occupational health cases was 99 in 2019, *versus* 79 in 2018.

Frequency rate



Severity rate



15.2 Social information

15.2.1 Breakdown of employees

As of December 31, 2019, the workforce of the Group totaled 89,352 employees. This represents 577 additional employees and a change of +0.65% compared to the end of 2018, and can be broken down as follows:

- an increase of 425 employees due to the scope effect, including:
  - acquisitions totaling 575 employees (number of people at the time of acquisition), mainly corresponding to the acquisition of ALS Analytical Testing in Asia (225 employees),
  - disposals totaling 150 employees (number of people at the time of disposal);
- organic increase in employees of 152 people. The most significant variations are related to winning the Greater Manchester waste management contract in the United Kingdom (611 employees), to terminating the waste collection contracts in Morocco (858 employees) and to losing the Société de Gestion et l'Assainissement de Bordeaux contract (209 employees).

Breakdown of employees by geographical area

	2017 Number	2018 Number	2019 Number	2019 %
France (metropolitan and overseas territories)	31,249	30,842	30,114	33.7%
Europe (excluding France)	28,012	30,096	30,968	34.7%
North America [a]	11,183	7,918	8,319	9.3%
South America	3,757	4,543	4,708	5.3%
Africa/Middle East	8,555	7,639	6,759	7.5%
Asia-Pacific	5,820	7,737	8,484	9.5%
Total (XXX) [b]	**88,576**	**88,775**	**89,352**	**100.0%**

(a) The acquisition of GE Water was allocated in its entirety to the North America region in 2017. In 2018, the allocation was made in relation to the corresponding countries.
(b) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report".

Breakdown of employees by professional category

	2017 Number	2018 Number	2019 Number	2019 %
Executives (XXX) [a]	13,868	16,805	17,615	19.7%
Senior technicians and supervisors (XXX) [a]	21,732	19,783	20,215	22.6%
Manual and non-manual workers and technicians (XXX) [a]	52,976	52,187	51,522	57.7%
Total	**88,576**	**88,775**	**89,352**	**100.0%**

(a) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report".

The proportion of managers continues to grow, reaching 19.7%, compared to 18.9% at the end of 2018.

The 30,114 employees in France can be broken down as follows: 6,135 executives (20.4%), 5,909 senior technicians and supervisors (19.6%), and 18,070 manual and non-manual workers and technicians (60.0%).

Breakdown of employees by gender

	2017	2018	2019
Proportion of women in total workforce (XXX) [a]	21.1%	21.8%	22.2%
Proportion of women in management (XXX) [a]	27.4%	27.6%	28.2%
Proportion of women in management excluding WTS (XXX) [a]	28.4%	29.4%	29.7%

(a) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report".

Within the total workforce, the percentage of women increased to 22.2% at the end of 2019, *versus* 21.8% at the end of 2018. The percentage of women among managers also rose to 28.2% at the end of 2019. Excluding the impact from the acquisition of GE Water, the proportion of women executives reached 29.7%, also marking an increase compared to the end of 2018 (29.4%).

In France, the proportion of women reached 24.5% of the overall workforce and 34.0% among management. In 2018, these proportions were 24.0% and 33.4%, respectively.

Breakdown of employees by contract type

	2017	2018	2019
Permanent contracts	92.1%	91.6%	91.4%
Fixed-term contracts	6.1%	6.3%	6.7%
Part-time learning and social insertion contracts	1.8%	2.1%	1.9%

The proportion of employees with permanent contracts within the total workforce (91.4%) remained squarely in the majority.

Part-time learning contracts and social insertion contracts accounted for 1.9% of the workforce and break down as follows:

- 1.5% in line with part-time learning contracts (apprenticeships and professionalization contracts in France, and similar types of contracts in other countries, if they exist). These contracts concerned 1,357 employees at the end of 2019;
- 0.4% in line with social insertion contracts through dedicated Recycling and Recovery France initiatives (primarily SUEZ R&R Rebond Insertion). They represented 310 employees at the end of 2019.

In France, permanent contract employees total 28,029, fixed-term contract employees total 540 and employees in part-time learning and social insertion contracts total 1,545. The proportions are 93.1%, 1.8% and 5.1%, respectively.

Breakdown of employees by age group (permanent employees only)

	2017	2018	2019
Under 25	2.3%	2.4%	2.4%
25-29 years	7.9%	7.8%	7.6%
30-34 years	12.0%	11.8%	11.9%
35-39 years	14.2%	14.2%	14.0%
40-44 years	14.8%	14.6%	14.3%
45-49 years	15.7%	15.6%	15.4%
50-54 years	15.3%	15.2%	15.0%
55-59 years	12.2%	12.7%	13.1%
60-64 years	4.7%	4.7%	5.2%
65 and over	0.9%	1.0%	1.1%

The average age of Group employees is 44.5. The proportion of the workforce under the age of 30 is 10%, and employees aged 55 and over represent 19.4% of the workforce.

In France, the average age is 43.9. The proportion of the workforce under the age of 30 is 9.4%, and employees aged 55 and over represent 17.3% of the workforce.

15.2.2 Employment and working conditions

Hiring

	2017	2018	2019
Number of external hires on permanent contracts	6,526	8,424	8,221
Number of external hires on fixed-term contracts	9,641	10,239	9,075
Hiring rate [a]	19.3%	21.0%	19.5%
Hiring rate for permanent posts [b]	40.4%	45.1%	47.5%

(a) Hiring rate: number of hires under permanent and fixed-term contracts/average workforce.
(b) Hiring rate for permanent contracts: number of people hired under permanent contracts/number of people hired under permanent and fixed-term contracts.

The number of external hires on permanent contracts made in 2019 (8,221) declined by 2.4% (203 fewer new hires) compared to 2018.

These 8,221 new hires under permanent contracts break down as follows:

- by professional category: 1,502 executives (18.3%), 1,661 senior technicians and supervisors (20.2%), and 5,058 manual and non-manual workers and technicians (61.5%);
- by gender: 1,951 women (23.7%) and 6,270 men (76.3%). Among executives: 506 women (33.7%) and 996 men (66.3%);
- by age group: 1,086 employees under the age of 25 (13.2%) and 1,320 employees aged 50 and over (16.1%).

In France, the Group hired 4,270 new employees in 2019, consisting of 2,078 under permanent contracts and 2,192 under fixed-term contracts. The overall hiring rate was 14.1% and the hiring rate under permanent contracts was 48.7%. The number of new hires under permanent contracts decreased by -1.3% compared to 2018.

Additionally, since 2016, the Group has monitored the conversions from fixed-term contracts to permanent contracts. This year, 1,502 fixed-term contracts were converted into permanent contracts. The main countries involved were France (337), Spain (286), Poland (197), the Netherlands (151), and Germany (108).

Employee turnover

	2017	2018	2019
Number of layoffs	2,535	2,394	2,308
Number of resignations	3,553	4,242	4,450
Number of retirements	1,007	1,124	1,090
Turnover [a]	7.3%	7.5%	7.6%
Voluntary turnover [b] (XXX) [c]	4.2%	4.8%	5.0%

(a) Turnover: number of layoffs and resignations/average workforce.
(b) Voluntary turnover: number of resignations/average workforce.
(c) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report".

Compared to 2018, the global turnover rate increased slightly, reaching 7.6% in 2019.

In France, overall turnover was 5.6% and voluntary turnover was 2.9%. The figures were: 810 layoffs, 868 resignations and 415 retirements.

In the Group's database of indicators, contract terminations are counted as layoffs. In France, 32.5% of layoffs are, in reality, contract terminations.

Working hours

	2017	2018	2019
Average weekly number of hours worked per employee [a]	33.8	34.0	34.3
Overtime rate [b]	4.2%	4.4%	4.5%
Proportion of part-time workers among total workforce	4.0%	4.4%	4.2%

(a) On the basis of 52 weeks.
(b) Overtime rate: number of overtime hours/number of hours worked.

In France, overtime represented 2.9% of the total number of hours worked, and part-time workers represented 3.5% of the workforce.

Absenteeism

	2017	2018	2019
Average number of days of absence/person	11.6	11.7	12.3
Of which average number of days of sick leave (days/person)	*8.0*	*8.2*	*8.6*

Based on a theoretical eight-hour working day, average absenteeism per employee was 12.3 days in 2019. The Group generally believes that the absenteeism rate is not significant, because it comprises absences of all kinds, including suspended contracts. This rate is also dependent on the social systems and local situations (especially climate) in the countries where the Group operates.

In France, the average length of absence per employee was 13.1 days, of which 8.8 days involved sick leave.

Employees with disabilities

	2017	2018	2019
Employees with disabilities as % of total workforce at end of period	1.6%	1.8%	1.7%
Of which France	*2.4%*	*3.1%*	*2.8%*
Of which Germany	*5.8%*	*5.3%*	*5.1%*

The number of disabled workers is a difficult indicator to track at the Group level, insofar as the notion of disabled worker is not clearly defined in every country in which the Group operates.

At the end of December 2019, the Group employed 1,499 disabled workers, 143 of whom had been hired that year. Most (84.5%) of the disabled employees recorded work in France, Spain, Germany, the Czech Republic or the United States. These five countries, in which the Group's presence is significant, have had laws on hiring disabled persons for many years.

In France, a specific reporting system is used to measure the overall insertion rate. This rate is calculated by adding direct and indirect jobs. Indirect jobs include the number of invoiced contracts in the protected sector, under the terms defined in the mandatory disclosure on disability employment. It reached 3.6% for 2018 for direct jobs, purchases in the protected sector, hosting trainees. Taking into account the application of beneficiary units corresponding to reductions (efforts agreed to by the employer and for the ECAP), the rate reached 4.4%.

Wages and salaries

(in thousands of euros)	2017	2018	2019
Gross payroll	2,947,663	3,331,263	3,507,300
Average gross compensation per employee (FTE)	36.1	38.5	40.5
Executives	73.6	76.6	79.4
Non-executives	29.0	29.7	31.0
Average rate of employer's contributions	34.6%	33.5%	32.2%

The change in average compensation is a result of impacts in the compensation policies. It is also impacted by the geographical change in the Group's employees (decrease in workforce in Morocco where average salary is lower than the Group's average salary, increase in areas where the opposite is true and compensation is higher). Lastly, other factors influence changes in this average data: foreign exchange rates, breakdown by socio-economic category, the proportion of part-time employees and the "Noria" effect.

Temporary workers

	2017	2018	2019
Average temporary workforce (FTE)	6,321	6,887	8,826
As % of average contractual workforce expressed in full-time equivalents (FTE)	7.7%	8.0%	10.2%

The main reasons for employing temporary workers are temporary hiring difficulties and the replacement of absent employees. Temporary workers are hired primarily in the Recycling and Recovery segment. The increase this year is related to using more temporary workers in North America and Asia.

In France, Group entities employed a total of 3,484 temporary workers, representing 11.9% of the average contractual workforce in FTE terms.

Workplace safety

	2017	2018	2019
Number of fatal accidents (employees) (XXX) [a]	4	4	2
Number of fatal accidents (temporary workers)	–	–	–
Number of fatal accidents (subcontractors)	1	0	1
Frequency rate of workplace accidents [b] (XXX) [a]	8.54	8.15	6.94
Severity rate of workplace accidents [c] (XXX) [a]	0.48	0.41	0.39

(a) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report". Note that the definition has been refined for 2019.
(b) Frequency rate: number of accidents with sick leave X 1,000,000/number of hours worked (Employees excluding temporary workers and subcontractors).
(c) Severity rate: number of days of sick leave X 1,000/number of hours worked (Employees excluding temporary workers and subcontractors).

The improvement noted in recent years in the Health and Safety key indicators has continued both in terms of accident frequency and severity. The frequency rate (FR) fell 15% and the severity rate (SR) fell 5% compared to 2018.

The total gain in the FR and SR is the result of continuous efforts at our Water business (FR of 4.14 and SR of 0.20 at the end of 2019; FR of 4.53 and SR of 0.17 at the end of 2018) and our Recycling and Recovery business (FR of 10.27 and SR of 0.62 at the end of 2019; FR of 12.38 and SR of 0.69 at the end of 2018). Regarding occupational illnesses in the Group (excluding Australia where legislation does not define or require occupational illnesses to be tracked), the number of new known cases is 99 in 2019 (79 in 2018), 80 of which (70 in 2018) for Recycling and Recovery and 19 for Water (9 in 2018).

15.2.3 Training

	2017	2018	2019 [d]
Number of training hours *(in thousands)* **(XXX)** [a]	**1,309**	**1,556**	**1,623**
Including number of hours of training via e-learning (in thousands)	*189*	*257*	*287*
Number of training hours per person trained *(h/pers.)*	**23.3**	**25.3**	**26.4**
Number of training hours per woman trained *(h/pers.)*	24	24	26
Percentage of workforce trained (XXX) [a]	**67.2%**	**69.3%**	**69.4%**
Breakdown of workforce trained by gender			
Women	20.1%	21.2%	21.1%
Men	79.9%	78.8%	78.9%
Breakdown of workforce trained by category			
Executives	16.9%	20.3%	19.3%
TSM [b] + OET [c]	83.1%	79.7%	80.7%
Training expenditure per person trained *(euros/pers.)*	447	449	419
Breakdown of training hours by type of activity *(as a % of total hours excluding e-learning)*			
Business techniques	29.3%	24.2%	20.0%
Quality, environment, safety	36.0%	41.4%	44.4%
Languages	7.6%	3.9%	4.1%
Other	27.1%	30.5%	18.0%
Personal development			3.4%
IT and office support system			3.5%
Cross-entity and support functions			4.3%
Digital and innovation			1.3%
Project and contract management			1.0%

(a) See meaning of (XXX) in section 15.2.6: "Methodological factors in the 2019 Social Report".
(b) Senior technicians and supervisors.
(c) Manual and non-manual workers and technicians.
(d) Data collected is from January 1, 2019 to December 31, 2019 for the entire Group except for WTS (ex-GE), which is from January 1, 2019 to September 30, 2019.

In 2019, training represented 1.62 million hours. More than two-thirds of the Group's employees have been trained, which represents an average of 26.4 training hours per employee trained.

The number of training hours *via* e-learning represented 17.7% of total training hours during the year.

The distribution of workforce trained by gender and by category is close to the distribution of total headcount according to these same criteria.

Quality, environment and safety remains the primary training area. This domain comprises 44.4% of the training hours delivered, followed by business techniques (20.0%). It should be noted that training classified as "Other" mainly comprises "management" and "sales" training.

In France, 62.8% of employees received training (58.4% in 2018). Training expenditure per person trained amounted to EUR 770 (EUR 708 in 2018) and the number of training hours per trained employee was 24.7 hours (25.8 hours in 2018).

15.2.4 Employee relations

	2017	2018	2019
Number of agreements with social partners	455	406	574
Proportion of workers with access to a representative body in their local legal entity	86%	81%	86%

The number of agreements signed increased. The year over year variations can be explained by the pace of renewal of preexisting agreements which are not generally annual.

With regard to Health and Safety, the European agreement covers all the European entities. The first agreement transposed within SUEZ after setting up the EWC was signed in Barcelona on June 12, 2014. Outside of Europe, the Group applies the principles of the European agreement on Health and Safety to its HR policies. In the rest of the world, agreements on Health and Safety are included in the overall figure of the agreements signed with the social partners shown in the table.

Nearly 46% of agreements signed relate to compensation and social benefits.

15.2.5 Key indicators by geographical area

	France (metropolitan and overseas territories)	Europe (excluding France)	North America	South America	Africa/ Middle East	Asia/ Pacific	Total
Number of employees	30,114	30,968	8,319	4,708	6,759	8,484	89,352
Proportion of women in the total workforce *(%)*	24.5%	22.8%	20.8%	21.5%	9.5%	23.9%	22.2%
Proportion of executives in the total workforce *(%)*	20.4%	15.6%	29.4%	14.1%	14.9%	30.1%	19.7%
Proportion of permanent contracts *(%)*	93.1%	90.5%	92.9%	92.0%	95.3%	83.9%	91.4%
Average weekly number of hours worked/employee	29.6	33.0	41.3	39.2	41.4	40.3	34.3
Average number of days of absence/employee	13.1	16.5	7.8	11.3	4.0	5.8	12.3
Average number of days of sick leave/employee	8.8	12.7	5.2	5.7	2.0	3.8	8.6
Average gross compensation/FTE employee *(in thousands of euros)*	40.2	34.2	82.8	26.7	15.3	42.0	40.5
Percentage of workforce trained	62.8%	78.2%	66.4%	79.4%	58.7%	67.2%	69.4%
Hiring rate	14.1%	26.2%	20.8%	20.8%	8.4%	22.0%	19.5%
Turnover rate	5.6%	9.1%	10.1%	8.3%	4.3%	9.8%	7.6%

15.2.6 Methodological factors in the 2019 Social Report

Scope

The employment analyses carried out in this report correspond solely to fully consolidated (FC) entities, companies that SUEZ controls in terms of share capital and management. When a company is fully consolidated in the SUEZ Group's financial statements, 100% of its social data is included, regardless of the percentage of share capital held. Except as noted below, the reporting scope for 2019 showing coverage of the indicator in question as a percentage of Group workforce was nearly 100% for all indicators.

Tools and methods

Social reporting is based on:

- a network of some 200 individuals around the world who collect and monitor their own entities' indicators during each quarterly HR reporting campaign. Each quarter, the data from around 1,000 legal entities is collected and consolidated, grouped into 370 reporting packages and fed into the tool by the local Human Resources managers. This network is managed through quarterly meetings (physical meetings for correspondents at French entities and Skype meetings for international correspondents). These meetings provide an opportunity for top-down communication, for clarifying the definition of some indicators, sharing best practices and reviewing major points of concern. A collaborative space is also available to all correspondents;
- the "User Guide," which consolidates all definitions and procedures comprising the Group's common reference system, *i.e.* some 50 primary indicators with various collection criteria (age, gender, etc.) producing approximately 250 social indicators. This guide is available in French and English. It is distributed to all the contributors;
- SUEZ's financial consolidation software application which, based on a dedicated social indicators package, enables the collection, processing, and reporting of data entered by the local legal entities and subsidiaries of the Group. Each of these entities, including in the HR phase, is allocated the appropriate financial consolidation method: full consolidation (FC), proportional consolidation (PC), and equity method (EM). An e-learning module on HR reporting is available to contributors. This module allows new users to teach themselves how to navigate within the tool and acquire the social indicators requested (definitions, examples and hints). This training helps existing users to deepen their knowledge of the subject matter.

Consolidation and internal control

Once collected, the data is consolidated by the subsidiaries and the Group Human Resources Department (HRD), in accordance with clearly defined procedures and criteria. This data is controlled internally during the following stages:

- automated controls: the consolidation packages incorporate a certain number of automated controls that allow contributors to ensure the reliability of the information entered at the most detailed level. Contributors also have access to the comments sections, where they can explain significant changes or circumstances specific to their entity;

- checks at subsidiary level: the major subsidiaries carry out checks on the consistency of the data supplied by their entities;
- checks at Group HR level: the Group HR department carries out checks on the consistency of the data supplied by all entities. These checks consist specifically of analyzing changes in indicators over time. In the event of a significant change, the contributor in question is asked to provide a more in-depth analysis, which may result in a correction.

Methodology definitions and limits

We would like to highlight the following points in relation to the data published in this report:

- the breakdown of workforce by geographical area is in line with the reporting segments used in the Consolidated Financial Statements;
- regarding the acquisition of GE Water, for the second year of consolidation, the Group implemented the necessary actions to compile more in-depth reporting, with a breakdown of employees per country of activity;
- after the roll-out of a new Group Human Resources Management tool, "Talent'Up", substantive work was done to harmonize the definition of the notion of "executive", which had been underestimated until that point;
- given the deadlines, the data concerning training is not always finalized and might therefore be based on estimates;
- as regards training, while collecting training hours completed through e-learning is relatively easy in the entities, it is not always as easy to reconcile the number of trainees who received in-person training with the number of trainees who received e-learning training. The risk lies in overestimating the total number of trainees due to double-counting employees who have received training both in-person and *via* e-learning. Therefore, only two entities (Agbar and SUEZ Water Inc.) count "e-learning" trainees in their trained workforce, because their internal tracking systems enable them to avoid the risk of double-counting. Training data for WTS (formerly GE Water) is the data collected for the period from January 1 to September 30, 2019;
- note that the figures on occupational illness have been reported on a global basis since 2014. Nevertheless, the Group continues to improve the organization and quality of its reporting on this subject. In fact, the concept of employer recognition of occupational illness, which applies in France, is not found in most countries worldwide. As a result, there may be discrepancies in the way data on occupational illnesses is calculated owing to differences in local practices and regulations;
- the definition and scope of fatal accidents taken into account has been refined with an independent third party, as part of the 2019 review. As a result, fatal accidents that SUEZ has accounted for are linked to SUEZ's businesses, excluding commutes, and relating to investigations known on the date this document was published. They are tracked by employees (including employees, interns and part-time learning students) and temporary workers.

For subcontractors specifically, recognizing fatal work-related accidents includes third-party companies intervening in the production or work process (group operating activity) that have a subordinate relationship with SUEZ and are characterized as at-fault (event where the main cause comes from a behavior and/or decision (or lack of decision)/action of a SUEZ employee) (see chapter 15.2 and section 15.1.5). Note that this definition applies as from the 2019 data published.

External audit

As in previous years, the SUEZ Group hired the specialized services of the Statutory Auditors to verify twenty social indicators for 2019: thirteen indicating reasonable assurance (indicated by the special characters "XXX") and seven indicating moderate assurance. More information regarding the work and findings of the Statutory Auditors can be found in section 5.9.8 of this Universal Registration Document.

15.3 Employee incentives and employee shareholding

15.3.1 Employee incentives and profit sharing (France)

Each subsidiary of the Group in France has implemented profit-sharing agreements (pursuant to the mandatory provisions of French law). Incentive agreements (optional in France) have also been implemented within the following companies: SUEZ International, some companies of Water France and around half the French subsidiaries of Recycling and Recovery France.

These arrangements for 2018 produced the following results in 2019:

- EUR 21 million was paid out under profit-sharing agreements, benefiting 16,411 employees at an average of approximately EUR 1,300 per beneficiary;

- at the same time, EUR 20.6 million was paid out under incentive agreements, benefiting 23,135 employees at an average of around EUR 900 per beneficiary.

In total, incentive and profit-sharing agreements represented EUR 41.6 million, or 2.2% of the gross payroll including employer's contribution to the companies concerned, an increase of 17% compared to the EUR 35.7 million paid out in 2018.

15.3.2 Group Salary and Pension Savings Plan

In 2016, SUEZ transformed its employee incentives program so that all Group employees can build up medium- or long-term savings, managed by a single point of contact. As part of this new program, employees now have access to a range of Socially Responsible Investment (SRI) funds.

Group savings plan (PEG)

The savings plan, set up in March 2011 and intended for all the employees of the Group companies in France, was replaced by the new PEG, for which an agreement was signed between the social partners on April 15, 2016.

As of December 31, 2019, 34,796 Group employees have invested in the PEG and hold around EUR 242 million in assets.

GOVERNANCE OF THE EMPLOYEE SAVINGS PLAN

The application of the new PEG agreement is managed by a joint monitoring committee made up of four members from the signatory trade union organization and four members from Management. This commission meets once per year.

The financial, accounting and administrative management of the funds is overseen by a Supervisory Board which meets at least once per year.

These funds, invested in SUEZ shares within the Group savings plan, are managed by specific Supervisory Boards, which are 50% composed of representatives of the employee unitholders and 50% of management representatives. The Supervisory Board exercises the voting rights attached to shares held by the Company mutual fund.

Group Pension Savings Plan (PERCO)

SUEZ offers a Group Pension Savings Plan (PERCO) through an agreement signed on December 10, 2013 with the social partners. This program offers employees of the Group in France the possibility of establishing long-term savings to supplement pension benefits at an attractive tax rate.

The SUEZ PERCO offers a range of diversified investments and a choice of plan management adapted to the investment period and employee life goals.

A Supervisory Board for dedicated PERCO funds is set up yearly. It is comprised of equal numbers of employee and management representatives.

As of December 31, 2019, 20,910 Group employees had savings in the PERCO, with assets representing around EUR 70 million.

International Group savings plan (PEGI)

In 2011, SUEZ set up an International Group savings plan (PEGI) intended for all employees of the Group's companies around the world.

The PEGI was created to serve as a mechanism for acquiring shares of the Group *via* a company mutual fund and the allocation of free bonus shares.

15.3.3 Employee shareholding

Since its IPO in 2008, the Company has prioritized employee shareholding and has the dual objective of involving the Group's employees over the long term in its business development plans and having 5% of the share capital held by employees.

Employee shareholding programs in place

SUEZ has set up several programs to encourage employee shareholding:

- in 2009, the first worldwide bonus share allocation plan. 68,000 employee beneficiaries in over 40 countries received 30 shares;
- in 2011, an employee share issue, called "Sharing 2011", subscribed by 18,679 employees in 19 countries;
- in 2013, the second worldwide bonus share allocation plan. 79,000 employee beneficiaries in 32 countries received 38 shares;
- in 2014, a second employee share issue, called "Sharing 2014", subscribed by 16,519 employees in 22 countries;
- in 2017, a third employee share issue, called "Sharing 2017", subscribed by 21,845 employees in 20 countries;
- in 2019, a fourth employee share issue, called "Sharing 2019", subscribed by 17,317 employees in 25 countries.

Implementation of the fourth employee share issue, "Sharing 2019"

In October 2019, SUEZ launched Sharing 2019, our fourth employee shareholding plan, in France and abroad.

Sharing 2019 was open to more than 84,000 employees in 25 countries: Germany, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, Spain, the United States, France, Hong-Kong, Hungary, India, Italy, Jordan, Luxembourg, Macau, Morocco, Mexico, the Netherlands, Poland, the United Kingdom, Sweden and the Czech Republic. For the first time since acquiring GE Water, employees of the Water Technologies and Solutions business unit were able to subscribe and become Group shareholders.

This fourth share subscription offer is a voluntary policy to encourage employee shareholding within the Group, as mentioned above. It lets employees get more closely involved with the Group's growth and performance and demonstrates a collective commitment to SUEZ's values and ambition.

SUEZ is offering employees two options under the Sharing 2019 offer:

- one "standard" option with a discount and company contribution, where the subscriber is exposed to share price fluctuations. In France, employees have received an employer contribution as part of the savings plan. Outside France, the employer contribution has taken the form of a bonus share allocation. Alternatively, in the United Kingdom, a Share Incentive Plan (SIP) has been set up;
- a "multiple" option *(via* a swap with a lead bank), where the subscriber receives at maturity at least the amount of their personal contribution plus either a guaranteed return, or a multiple of the performance of SUEZ shares, whichever is higher. In Australia, Canada, Chile, China, the United States, Italy, Poland, and in Sweden, the multiple option has been modified according to local law and carried out through an alternative mechanism called "stock appreciation rights".

The shares have been subscribed by the beneficiaries either directly, or through a company mutual fund (FCPE), depending on the country of residence. The subscribers of the offer must hold the shares or the units until January 16, 2025, unless an early release occurs.

Excluding SIP, the subscription price is equal to:

- for the standard option: 80% of the average opening SUEZ share price on the Euronext Paris market over the 20 trading days preceding the date that the subscription price is set. This has been set at EUR 10.52;
- for the multiple option: 90% of the average opening SUEZ share price on the Euronext Paris market over the 20 trading days preceding the date that the subscription price is set. This has been set at EUR 11.84.

The operation, which expired definitively on January 16, 2020, was successfully completed: 17,317 employees in the 25 participating countries subscribed for the offer. The subscription rate was nearly 21%, *i.e.* an employee contribution of around EUR 25 million.

At the end of this operation, 7 million new shares were issued by the Company, resulting in the issue of 9,970,050 shares linked to employee subscriptions and the cancellation of 2,970,050 treasury shares, voted on by the Board of Directors on January 28, 2020.

Participation of employee shareholders

As of December 31, 2019, the total number of shares held by the Group's employees under the definition of the law for growth, activity and equal economic opportunities, the so-called "Macron Law" of August 6, 2015, directly in individual registered accounts or through Company mutual funds, accounts for 2.57% of the share capital. In accordance with that same definition, as of the end of December 2018, this figure was 3.73% of the share capital. The erosion recorded in 2019 came from the end of the lock-up period of assets invested by employees under the Sharing 2014 operation. Note that nevertheless, as of January 31, 2020, employees hold 4.12% of the share capital as a result of the Sharing 2019 operation described above.

Since 2016, a Director representing employee shareholders sits on the Board of Directors.

15.4 Pensions and other employee benefit obligations

A description of the pensions and other employee benefit obligations appears in Note 19 to the Consolidated Financial Statements in chapter 18.1 of this Universal Registration Document.

16 Major shareholders

16.1 Breakdown of share capital as of December 31, 2019

As of December 31, 2019, the Company's share capital totaled EUR 2,485,450,316. It consisted of 621,362,579 shares with a par value of EUR 4 each, representing 621,362,579 voting rights.

As of December 31, 2019, the number of shares without voting rights (shares held by the Company for the share buyback program described in section 19.1.3 of this Universal Registration Document) totaled 3,213,435 shares, hence a total number of exercisable voting rights of 618,149,144.

The voting rights of the Company's major shareholders are no different from those of other shareholders.

The Company's share capital did not change in 2019.

The following table shows the number of shares and percentages of capital and voting rights held by the Company's major shareholders, based on information available on the date this Universal Registration Document was prepared.

	As of December 31, 2019			As of December 31, 2018			As of December 31, 2017		
Shareholders	Number of shares held	% of shares held	% of exercisable voting rights	Number of shares held	% of shares held	% of exercisable voting rights	Number of shares held	% of shares held	% of exercisable voting rights
ENGIE	199,233,320	32.06%	32.23%	199,233,320	32.06%	32.25%	199,233,320	31.96%	32.22%
Criteria Caixa	37,110,685	5.97%	6.00%	37,110,685	5.97%	6.01%	36,545,000	5.86%	5.91%
Employee shareholding [a]	15,939,469	2.57%	2.58%	23,182,132	3.73%	3.75%	23,728,152	3.81%	3.84%
Inversiones Los Canelos [b]	22,383,196	3.60%	3.62%	Not known	–	–	Not known	–	–
Caltagirone [c]	21,680,174	3.49%	3.51%	21,680,174	3.49%	3.51%	21,680,174	3.48%	3.51%
Treasury shares	3,213,435	0.52%	–	3,534,950	0.57%	–	5,067,913	0.81%	–
Other	321,802,300	51.79%	52.06%	336,621,318	54.17%	54.48%	337,108,020	54.08%	54.52%
Of which free float	*321,802,300*	*51.79%*	*52.06%*	*336,621,318*	*54.17%*	*54.48%*	*337,108,020*	*54.08%*	*54.52%*
Total	**621,362,579**	**100%**	**100%**	**621,362,579**	**100%**	**100%**	**623,362,579**	**100%**	**100%**

(a) Including the shares from the bonus share allocation plans and the performance shares held in registered accounts by employees of the Company and its subsidiaries.
(b) Based on information provided by Inversiones Los Canelos on December 31, 2019.
(c) The shares held by the Caltagirone Group, through the companies Gamma, FINCAL, VIAPAR SO.FI.COS and VIAFIN, are subject to a lock-up period until September 2020.

Pursuant to Article L. 233-13 of the French Commercial Code and to the knowledge of SUEZ, as of December 31, 2019, there were no shareholders other than those mentioned above holding 5% or more of the share capital or voting rights directly, indirectly or together.

In addition, as a reminder, Article 7 of the Company's bylaws states that companies are obligated to report when they cross legal shareholding thresholds. As a result, any individual or legal entity that either alone or in concert comes to hold or ceases to hold a fraction of the share capital or voting rights of 1% or more, and then, above this threshold, any multiple of 1% up to a threshold of 33% of the share capital or voting rights, is required to notify the Company, by registered letter with acknowledgment of receipt, within five business days of crossing one of these thresholds, stating the total number of shares they hold directly, indirectly or jointly. To determine these thresholds, account will also be taken of shares held indirectly and of quasi-shares as defined in the provisions of Articles L. 233-7 *et seq.* of the French Commercial Code.

As of the date of this Universal Registration Document, the Company's share capital amounts to EUR 2,513,450,316. It consists of 628,362,579 shares with a par value of EUR 4 each, representing 628,362,579 voting rights. The changes in the Company's share capital that took place since December 31, 2019 are due to:

- the capital increase that took place on January 16, 2020 after setting up the SHARING 2019 employee shareholding plan in accordance with resolutions 19, 20 and 21 approved at the Shareholders' Meeting on May 14, 2019; and
- the capital reduction that took place on January 28, 2020 in accordance with resolution 18 approved by the Shareholders' Meeting on May 14, 2019.

At the end of these transactions, employee shareholding accounted for 4.12% of the Company's share capital.

16.2 Major shareholders' voting rights

Each Company share entitles the holder to one voting right.

16.3 Control of the Company

16.3.1 Absence of control of the Company

No third party exercised control over the Company in 2019.

16.3.2 Factors likely to have an impact in the event of a takeover bid

The information below, dated December 31, 2019, is provided in compliance with the provisions of Article L. 225-37-5 of the French Commercial Code:

- the Company's ownership structure is described in chapter 16.1 of this Universal Registration Document;
- there are no restrictions in the bylaws on the exercise of voting rights or the transfer of shares or clauses of agreements notified to the Company pursuant to Article L. 233-11 of the French Commercial Code;
- direct or indirect shareholdings in the Company of which it is aware by virtue of Articles L. 233-7 (threshold crossing declaration) and L. 233-12 of the French Commercial Code are described in chapter 16.1 of this Universal Registration Document;
- there are no holders of shares with special control rights;
- the operating mechanisms built into the Company's employee shareholding program are described in chapter 15.3 of this Universal Registration Document;
- to the Company's knowledge, there are no agreements between shareholders that could lead to restrictions in the transfer of shares and in the exercise of the Company's voting rights. Caltagirone has made a commitment not to transfer its shares in the Company until September 2020. However, this commitment does not apply in the event of a takeover bid on the shares of the Company if this offer has received a favorable opinion from the Board of Directors of the Company;
- the rules applicable to the appointment and replacement of members of the Board of Directors are set out in Article 10 of the Company bylaws, which are available on the Company's website at www.suez.com;
- the powers of the Board of Directors for the issuance or buyback of shares are presented in chapter 19.1 of this Universal Registration Document;
- the Company may enter into agreements containing clauses which could, under certain conditions, lead to their early termination in the event of a change of control of the Company, some of which could, according to the Company, have an impact in the event of a takeover bid. These include:
  - certain financing agreements, as mentioned in Notes 13 and 14 to the Consolidated Financial Statements in chapter 18.1 of this document for the year ended December 31, 2019, including bonds issued under the EMTN program set up by the Company; the issues of Undated Deeply Subordinated Notes, known as "hybrids", carried out in 2014, 2015, 2017 and 2019; the syndicated loan set up in February 2010, renegotiated in 2011, 2014, and 2019, maturing in 2024 and with options to extend until 2026, amounting to EUR 2.5 billion, provided the change of control is accompanied by a downgrade of the Company's rating to below a certain threshold;
- there is no agreement providing for the payment of severance pay to a Director (except for the Chief Executive Officer) if that person resigns or is dismissed following a public takeover or swap bid. Situations under which severance is likely to be paid to the Chief Executive Officer if his term of office is terminated are provided in chapter 13 of this Universal Registration Document.

16

16.4 Agreement that may result in a change of control

None.

16.5 Summary of transactions made by the persons indicated in Article L. 621-18-2 of the French Monetary and Financial Code during the year ended December 31, 2019

Transactions in 2019 by the persons indicated in Article L. 621-18-2 of the French Monetary and Financial Code

Name of shareholder	Date of transaction	Nature of transaction	Amount	Price/share
Francesco Caltagirone	11/28/2019	Disposal of shares	EUR 107,197	EUR 13.40
Martha Crawford	06/21/2019	Acquisition of shares	EUR 25,630	EUR 12.82
Julian Waldron	05/21/2019	Acquisition of shares	EUR 49,841.2	EUR 11.76

Number of shares held by members of the Board of Directors as of December 31, 2019

	Number of shares held as of December 31, 2019
Jean-Louis Chaussade	80,891 shares and 19,828.34 units of the SUEZ Actionnariat France mutual fund [b]
Bertrand Camus	10,287 shares and 4,230.61 units of the SUEZ Actionnariat France mutual fund [b]
Enric Xavier Amiguet i Rovira [c]	87 shares and 41.37 units of the SUEZ Shareholding international mutual fund [b]
Nicolas Bazire	2,000 shares
Miriem Bensalah-Chaqroun	2,000 shares
Franck Bruel	2,000 shares
Francesco Caltagirone	2,000 shares
Agatta Constantini [c]	136 shares and 159.35 units of the SUEZ Actionnariat France mutual fund [b]
Martha Crawford	2,000 shares
Delphine Ernotte Cunci	2,088 shares
Isidro Fainé Casas	2,000 shares
Judith Hartmann	2,000 shares [a]
Isabelle Kocher	4,475 shares [a]
Anne Lauvergeon	2,570 shares
Gérard Mestrallet	16,913 shares [a]
Pierre Mongin	2,000 shares [a]
Guillaume Pepy	2,100 shares
Brigitte Taittinger-Jouyet	2,000 shares
Guillaume Thivolle [c]	38 shares and 452.6 units of the SUEZ Actionnariat France mutual fund [b]

(a) Of which 2,000 shares as a loan granted by ENGIE.
(b) Mutual fund units acquired as part of the SUEZ Group's Employee Shareholding plans.
(c) Directors representing employees and employee shareholders not subject to the statutory obligation of owning 2,000 shares.

This table was prepared on the basis of information provided to the Company by the Directors.

17 Related-party transactions

17.1 Related-party transactions

Parties related to the Company include, among others, the Company's major shareholders, its non-consolidated subsidiaries, companies under joint control (proportionately consolidated companies), associates (equity affiliates), and entities on which various Company officers exercise at least a significant influence.

A breakdown of transactions with these related-parties for fiscal years 2019 and 2018, particularly ENGIE and its subsidiaries, appears in chapter 18.1, Note 21 of this document. The transactions are not significant at the level of the SUEZ Group.

The special report of the Statutory Auditors on the related-party agreements listed below describes the notified transactions.

17.2 Guarantees and counter-guarantees

The Company and ENGIE agree that all commitments involving guarantees, bonds, comfort letters, surety and any other similar commitments granted by ENGIE in respect of commitments made by Company subsidiaries to third parties have been transferred to the Company or any subsidiary acceptable by ENGIE. For any commitments unable to be transferred, the Company, or a subsidiary acceptable by ENGIE, must provide ENGIE with a counter-guarantee.

17.3 Statutory Auditors' Report on related party agreements

This is a translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Annual General Meeting of SUEZ,

In our capacity as Statutory Auditors of your Company, we hereby present to you our report on related party agreements.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements indicated to us, or that we may have identified in the performance of our engagement, as well as the reasons justifying why they benefit the Company. We are not required to give our opinion as to whether they are beneficial or appropriate or to ascertain the existence of other agreements. It is your responsibility, in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)*, to assess the relevance of these agreements prior to their approval.

We are also required, where applicable, to inform you in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)* of the continuation of the implementation, during the year ended December 31, 2019, of the agreements previously approved by the Annual General Meeting.

We performed those procedures which we deemed necessary in compliance with professional guidance issued by the French Institute of Statutory Auditors *(Compagnie nationale des commissaires aux comptes)* relating to this type of engagement. These procedures consisted in verifying the consistency of the information provided to us with the relevant source documents.

Agreements submitted for approval to the Annual General Meeting

In accordance with Article L. 225-40 of the French Commercial Code *(Code de commerce)*, we have been notified of the following related party agreement which received prior authorization from your Board of Directors.

With Société Générale and HSBC France

Persons concerned

Mr Gérard Mestrallet, Director of Société Générale and Director of your Company; Mrs Brigitte Taittinger-Jouyet, Director of HSBC France and Director of your Company.

Syndicated loan agreement's amendment

Nature and purpose

In its meeting on February 26, 2019, your Company's Board of Directors authorized the amendment to the syndicated loan agreement.

Conditions

The amendment to the syndicated loan agreement sets out the following terms:

- a corporate financing without granting of guarantees or securities;
- a loan's principal amount of 2.5 billion euros;
- an interest rate at EURIBOR or LIBOR rate, when appropriate, plus a profit margin that may be adjusted depending on the credit rating of the Company, and the index grid based on social and environmental aggregates;
- the maturity date is set on April 2024, with extension options until April 2026.

Reasons justifying why the Company benefits from this agreement

Your council justified this agreement as follow: The agreement ensures to SUEZ Group sufficient liquidity at favourable market conditions.

Agreements previously approved by the Annual General Meeting

In accordance with Article R. 225-30 of the French Commercial Code *(Code de commerce)*, we have been notified that the implementation of the following agreement, which was approved by the Annual General Meeting in prior years, continued during the year ended December 31, 2019.

With Criteria Caixa

Person concerned

Mr Jean-Louis Chaussade, Director of Criteria Caixa and Chairman of the Board and Director of your Company.

Nature and purpose

"Master Agreement" entered into between Agbar, Criteria Caixa and your Company.

Conditions

The Board of Directors of your Company authorized during its July 17, 2014 meeting that a framework agreement be entered into at that same date between your Company, Agbar and Criteria Caixa, which provides for the following terms:

- the transfer by Criteria Caixa of its 24.26% stake in Hisusa in counterpart to the issuance of 22 million new shares of your Company and a EUR 298,574 thousand cash amount, subsequent to the execution of a contribution agreement and the delivery of an independent auditor's report on the valuation of the contribution and the fairness of this value with the proposed remuneration (completed on September 17, 2014);
- the acquisition by Criteria Caixa from Agbar of a 15% stake in Aïgues de Barcelona, E.M. De Gestiò Del Cicle Integral de l'Aigua, S.A., 85% of which was held by Agbar at the time the agreement was entered into, and 15% of which is held by the Barcelona Metropolitan Area (completed in 2014);
- the acquisition by Criteria Caixa of a 14.50% stake in Aguas de Valencia, S.A. from your subsidiary SUEZ Groupe (completed in 2014);
- the cooptation by the Board of Directors of your Company of a Director designated by Criteria Caixa, as soon as the latter holds 5% of your Company's share capital. During its October 29, 2014 meeting, your Board of Directors coopted Mr Isidro Fainé Casas and appointed him as a member of the Strategy Committee;
- the commitment of Criteria Caixa to increase its interest in the share capital of your Company up to 7%;
- the obligation for Criteria Caixa to keep its shares during four years from the contribution completion.

Courbevoie and Paris-La Défense, February 26, 2020

The Statutory Auditors French original signed by

MAZARS		ERNST & YOUNG ET AUTRES
Achour Messas	Dominique Muller	Stéphane Pédron

18 Financial information relating to the Company's assets, financial situation and results

18.1 Consolidated Financial Statements

18.1.1 Consolidated statements of financial position

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Non-current assets			
Intangible assets, net	10	4,835.7	4,982.1
Goodwill	9	5,322.1	5,223.8
Property, plant and equipment net	11	8,891.0	8,774.4
Rights of use [a]	15	1,405.8	–
Equity instruments	13	132.2	133.0
Loans and receivables carried at amortized cost	13	653.7	610.7
Derivative financial instruments	13	115.7	119.0
Investments in joint ventures	12.1	953.9	897.4
Investments in associates	12.2	1,070.2	1,084.3
Contracts assets	4.1.3	46.2	95.6
Other assets		184.8	214.0
Deferred tax assets	7	541.9	546.6
Total non-current assets		**24,153.2**	**22,680.9**
Current assets			
Loans and receivables carried at amortized cost	13	91.4	109.7
Derivative financial instruments	13	75.5	97.6
Trade and other receivables	13	4,670.9	4,584.0
Inventories		528.0	499.5
Contracts assets	4.1.3	733.8	627.2
Other assets		1,648.5	1,500.7
Financial assets measured at fair value through income	13	29.8	29.2
Cash and cash equivalents	13	3,703.0	3,424.1
Total current assets		**11,480.9**	**10,872.0**
Total assets		**35,634.1**	**33,552.9**
Shareholders' equity, Group share		6,463.4	6,391.8
Non-controlling interests	17	2,824.8	2,600.8
Total shareholders' equity		**9,288.2**	**8,992.6**
Non-current liabilities			
Provisions	18	1,500.0	1,507.6
Long-term borrowings	13	9,914.0	9,803.2
Lease liabilities [a]	15	1,159.4	–
Derivative financial instruments	13	6.7	9.5
Other financial liabilities	13	42.8	47.2
Contracts liabilities	4.1.3	267.3	287.7
Other liabilities		566.6	591.6
Deferred tax liabilities	7	791.1	649.4
Total non-current liabilities		**14,247.9**	**12,896.2**
Current liabilities			
Provisions	18	475.2	496.1
Short-term borrowings	13	2,609.1	2,762.1
Lease liabilities [a]	15	314.9	–
Derivative financial instruments	13	57.3	47.2
Trade and other payables	13	3,534.3	3,798.9
Contracts liabilities	4.1.3	911.3	976.5
Other liabilities		4,195.9	3,583.3
Total current liabilities		**12,098.0**	**11,664.1**
Total shareholders' equity and liabilities		**35,634.1**	**33,552.9**

(a) Items created to record the effects of the application of IFRS 16 – Leases at January 1, 2019.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

18.1.2 Consolidated income statements

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Revenues	4.1	18,015.3	17,331.1
Purchases		(3,720.7)	(3,648.6)
Personnel costs		(4,701.4)	(4,598.4)
Depreciation, amortization and provisions		(1,531.7)	(1,167.7)
Other operating expenses		(7,089.8)	(6,999.2)
Other operating income		236.7	225.2
Current operating income	4	**1,208.4**	**1,142.4**
Mark-to-Market on operating financial instruments		3.7	(0.8)
Impairment on property, plant and equipment, intangible and financial assets		(64.8)	(25.6)
Restructuring costs		(132.3)	(87.6)
Scope effects		8.4	(6.2)
Other gains and losses on disposals and non-recurring items		26.6	60.1
Aguas Argentinas dispute settlement	2.2	214.9	–
Income from operating activities	5	**1,264.9**	**1,082.3**
Share in net income of equity-accounted companies considered as core business		198.3	192.9
of which: share in net income (loss) of joint ventures	12.1	*71.4*	*82.0*
of which: share in net income (loss) of associates	12.2	*126.9*	*110.9*
Income from operating activities after share in net income of equity-accounted companies considered as core business		**1,463.2**	**1,275.2**
Financial expenses		(603.8)	(555.6)
Financial income		89.8	90.2
Net financial income (loss)	6	**(514.0)**	**(465.4)**
Income tax expense	7	(340.0)	(244.0)
Net income		**609.2**	**565.8**
Of which: Group share		351.7	334.9
Non-controlling interests		257.5	230.9
Net income (Group share) per share *(in euros)*	8	**0.49**	**0.47**
Net diluted income (Group share) per share *(in euros)*	8	**0.48**	**0.47**

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

18.1.3 Consolidated statements of comprehensive income

(in millions of euros)	December 31, 2019	December 31, 2019 of which Group share	December 31, 2019 of which non controlling interests	December 31, 2018	December 31, 2018 of which Group share	December 31, 2018 of which non controlling interests
Net income	**609.2**	**351.7**	**257.5**	**565.8**	**334.9**	**230.9**
Available for sale securities [a]	–	–	–	2.4	2.7	(0.3)
Net investment hedges	–	–	–	0.4	0.4	–
Cash flow hedges (excluding commodities)	(20.1)	(19.7)	(0.4)	27.6	25.3	2.3
Commodity cash-flow hedges	10.3	9.2	1.1	(4.2)	(3.5)	(0.7)
Deferred taxes on items above	(2.3)	(2.1)	(0.2)	(2.2)	(1.7)	(0.5)
Translation adjustments	(15.6)	36.0	(51.6)	(5.0)	24.9	(29.9)
Total reclassifiable items	**(27.7)**	**23.4**	**(51.1)**	**19.0**	**48.1**	**(29.1)**
Of which share of joint ventures in reclassifiable items, net of taxes	*9.0*	*9.0*	–	*0.8*	*0.8*	–
Of which share of associates in reclassifiable items, net of taxes	*(7.7)*	*(7.7)*	–	*9.1*	*9.1*	–
Actuarial gains and losses	(90.6)	(65.4)	(25.2)	9.6	6.2	3.4
Deferred taxes on actuarial gains and losses	(16.0)	(22.0)	6.0	(35.3)	(34.3)	(1.0)
Equity instrument [a]	6.3	6.3	–	(124.0)	(123.6)	(0.4)
Deferred taxes on equity instrument [a]	(0.1)	(0.1)	–	0.2	0.2	–
Total non-reclassifiable items	**(100.4)**	**(81.2)**	**(19.2)**	**(149.5)**	**(151.5)**	**2.0**
Of which share of joint ventures in non-reclassifiable items, net of taxes	–	–	–	–	–	–
Of which share of associates in non-reclassifiable items, net of taxes	–	–	–	*2.9*	*2.9*	–
Other comprehensive income	**(128.1)**	**(57.8)**	**(70.3)**	**(130.5)**	**(103.4)**	**(27.1)**
Comprehensive income	**481.1**	**293.9**	**187.2**	**435.3**	**231.5**	**203.8**

(a) IFRS 9 standard replaces IAS 39 as from January 1, 2018. Available-for-sale financial assets as specified in IAS 39 at December 31, 2017 had been reclassified and measured in accordance with the principles of IFRS 9 standard. Since January 1, 2018, reclassifiable items of comprehensive income corresponding to available-for-sale assets are no longer measured as reclassifiable items in accordance with IFRS 9. Their variation over the financial year corresponds to the repayment of the opening stock.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

18.1.4 Statements of changes in consolidated shareholders' equity

(in millions of euros)	Note	Number of shares	Share Capital	Premiums	Consolidated reserves	Change in fair value and other	Translation adjustments	Treasury shares	Undated deeply subordinated notes	Share-holders' equity, Group share	Non-controlling interests	Total
Shareholders' equity at December 31, 2017		**623,362,579**	**2,493.4**	**5,236.4**	**(2,441.5)**	**(228.3)**	**(53.2)**	**(77.0)**	**1,580.6**	**6,510.4**	**2,511.4**	**9,021.8**
Net income					334.9					334.9	230.9	565.8
Other comprehensive income items IFRS 9 [(a)]						(122.8)				(122.8)	(0.8)	(123.6)
Other comprehensive income items excluding IFRS 9					(28.2)	22.7	24.9			19.4	(26.3)	(6.9)
Comprehensive income					**306.7**	**(100.1)**	**24.9**			**231.5**	**203.8**	**435.3**
Retained earnings IFRS 9 restatement [(a)]					67.5					67.5	(0.1)	67.4
Share-based payment					1.1					1.1		1.1
Dividends distributed in cash					(401.9)					(401.9)	(221.3)	(623.2)
Interests of undated deeply subordinated notes issue					(44.8)					(44.8)	–	(44.8)
Purchase/sale of treasury shares					(0.1)			25.2		25.1	–	25.1
Capital increase/decrease [(b)]		(2,000,000)	(8.0)	(21.2)	(0.8)					(30.0)	(18.0)	(48.0)
Transactions between shareholders [(c)]					36.0					36.0	29.3	65.3
Business combinations [(d)]										–	96.6	96.6
Other changes					(3.1)					(3.1)	(0.9)	(4.0)
Shareholders' equity at December 31, 2018		**621,362,579**	**2,485.4**	**5,215.2**	**(2,480.9)**	**(328.4)**	**(28.3)**	**(51.8)**	**1,580.6**	**6,391.8**	**2,600.8**	**8,992.6**

(a) See Note 1.2.4.4. of 2018 Reference Document.
(b) EUR 30 million capital reduction resulting from the cancellation of 2,000,000 treasury shares held by SUEZ. The decrease of -EUR 18 million in non-controlling interests corresponds to the repayment of the contribution to shareholder CDPQ by SWTS.
(c) Primarily concerned movements resulting from the Group's sale of 6.5% stake of the Chilean company IAM, a shareholder of Aguas Andinas, without loss of control.
(d) Primarily concerned the change of consolidation method of a Chinese joint venture to full consolidation.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

(in millions of euros)	Note	Number of shares	Share Capital	Premiums	Consolidated reserves	Change in fair value and other	Translation adjustments	Treasury shares	Undated deeply subordinated notes [a]	Share-holders' equity, Group, share	Non-controlling interests	Total
Shareholders' equity at December 31, 2018		**621,362,579**	**2,485.4**	**5,215.2**	**(2,480.9)**	**(328.4)**	**(28.3)**	**(51.8)**	**1,580.6**	**6,391.8**	**2,600.8**	**8,992.6**
IFRIC 23 restatement	1.2.4				(88.5)					(88.5)	(19.9)	(108.4)
Shareholders' equity at January 1, 2019		**621,362,579**	**2,485.4**	**5,215.2**	**(2,569.4)**	**(328.4)**	**(28.3)**	**(51.8)**	**1,580.6**	**6,303.3**	**2,580.9**	**8,884.2**
Net income					351.7					351.7	257.5	609.2
Other comprehensive income items					(12.6)	(81.2)	36.0			(57.8)	(70.3)	(128.1)
Comprehensive income					**339.1**	**(81.2)**	**36.0**			**293.9**	**187.2**	**481.1**
Share-based payment					17.5					17.5		17.5
Dividends distributed in cash					(401.8)					(401.8)	(259.7)	(661.5)
Issue of new undated deeply subordinated note net of issuance fees [b]									497.8	497.8	–	497.8
Partial redemption of undated deeply subordinated notes (including redemption premium) [b]					(9.1)				(354.6)	(363.7)	–	(363.7)
Interests of undated deeply subordinated notes issue					(47.1)					(47.1)	–	(47.1)
Purchase/sale of treasury shares					(1.4)			4.3		2.9	–	2.9
Transactions between shareholders [c]					209.1					209.1	292.0	501.1
Business combinations [d]					(9.7)					(9.7)	18.0	8.3
Deferred taxes recognized through equity write off [e]					(32.2)					(32.2)	–	(32.2)
Other changes					(6.6)					(6.6)	6.4	(0.2)
Shareholders' equity at December 31, 2019		**621,362,579**	**2,485.4**	**5,215.2**	**(2,511.6)**	**(409.6)**	**7.7**	**(47.5)**	**1,723.8**	**6,463.4**	**2,824.8**	**9,288.2**

(a) Undated deeply subordinated note net of issuance fees.
(b) See Note 2.4. In addition, early partial redemption was accompanied by redemption premium of EUR 9.1 million.
(c) Mainly related to the sale without loss of control of 20% of the regulated water business in the United States for EUR 217.0 million.
(d) Related to the takeover of Mina Publica in Spain in the column "Non-controlling interests".
(e) See Note 7.3.2.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

18.1.5 Consolidated statements of cash flows

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Net income		**609.2**	**565.8**
– Share in net income (loss) of joint ventures	12.1	(71.4)	(8.6)
– Share in net income (loss) of associates	12.2	(126.9)	(184.3)
+ Dividends received from joint ventures and associates		131.8	144.6
– Amortization, depreciation and provisions		1,474.8	1,103.7
– Other gains and losses on disposal and scope effects		(36.6)	(56.8)
– Other items with no cash impact		17.8	2.9
– Lease contracts impact [d]		4.1	–
– Income tax expense	7	340.0	244.0
– Financial income	6	514.0	465.4
Cash flows from operations before financial income/(expense) and income tax		**2,856.8**	**2,276.7**
+ Tax paid		(253.3)	(156.9)
Change in working capital requirements		**(153.1)**	**(146.4)**
Cash flows from operating activities		**2,450.4**	**1,973.4**
Investments in property, plant and equipment and intangible assets	3.4.3	(1,417.3)	(1,342.9)
Takeover of subsidiaries net of cash and cash equivalents acquired	3.4.3	(49.6)	(66.9)
Acquisitions of interests in associates and joint-ventures	3.4.3	(23.1)	(47.8)
Acquisitions of equity instrument	3.4.3	(15.9)	(31.7)
Disposals of propery, plant and equipment and intangible assets		85.6	157.9
Disposals of interests in associates and joint-ventures		15.8	(5.3)
Disposal of equity instruments		8.7	4.2
Loss of controlling interests in subsidiaries net of cash and cash equivalents sold		27.6	88.4
Other net interest on financial assets		(23.4)	14.1
Dividends received on non-current financial assets		3.6	8.5
Change in loans and financial receivables		(66.7)	(8.8)
Cash flows from investing activities		**(1,454.6)**	**(1,230.3)**
Capital increase/ reduction of parent company		–	–
Purchase/sale of treasury shares		2.9	(4.9)
Capital increase/ reduction of non controlling interests		5.2	(23.4)
Change in share of interests in controlled entities [a]	3.4.3	501.7	(10.8)
Dividends paid to parent company's shareholders [b]		(448.8)	(446.7)
Dividends paid to non controlling interests [b]		(266.8)	(249.4)
Issue of undated deeply subordinated notes net of costs	13.3.2	497.8	–
Repayment of undated deeply subordinated notes net of costs	13.3.2	(363.7)	–
Increase in loans and financial debt [c]	13.2.1	1,401.2	1,323.0
Repayment of lease liabilities [d]	15	(325.1)	–
Repayment of borrowings and financial debts	13.2.1	(1,448.0)	(766.5)
Change in financial assets at fair value through income		(0.6)	27.5
Financial interest on lease liabilities [d]	15	(29.3)	–
Financial interest paid		(363.5)	(392.5)
Financial interest received		11.2	26.6
Flows on financial derivatives qualifying net investment hedges and compensation payments on financial derivatives		(34.9)	(75.9)
Cash flows from financing activities		**(860.7)**	**(593.0)**
Impact of changes in exchange rates and other		20.6	4.7
Total cash flows for the period		**155.7**	**154.8**
Opening cash and cash equivalents		**2,710.2**	**2,555.4**
Closing cash and cash equivalents		**2,865.9**	**2,710.2**

(a) Including the sale without loss of control of 20% of the regulated water activities in the United States for EUR 510.2 million in 2019.
(b) Including withholding taxes and coupons of undated deeply subordinated notes paid by the parent company.
(c) In accordance with IAS 7.8, bank overdrafts due on demand included in financial liabilities in the consolidated statement of financial position are reclassified as cash and cash equivalents in the consolidated statement of cash flows; the reclassification amounts to EUR 837.1 million. For 2018 closing, the amount was EUR 713.9 million.
(d) These new lines are directly related to the application of IFRS 16 – Lease contract as of January 1, 2019.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

18.1.6 Notes to the Consolidated Financial Statements

Note 1 Basis of presentation, principles and accounting policies

1.1 Basis of presentation

SUEZ, the Parent Company of the Group, is a French *société anonyme* subject to the provisions of Book II of the French Commercial Code, as well as to all other legal provisions applying to French commercial corporations. It was incorporated in November 2000. The Group's headquarter is in the CB21 tower – 16, place de l'Iris – 92 040 Paris–La Défense – France.

The Group is a global player in the management of the water cycle and the waste cycle.

SUEZ is listed on the Euronext Paris (Compartment A) and Euronext Brussels markets since July 22, 2008.

On February 25, 2020, the Board of Directors of SUEZ approved and authorized the publication of the Group's Consolidated Financial Statements for the fiscal year ended December 31, 2019.

1.2 Accounting standards

Pursuant to European Commission Regulation (EC) 809/2004 on Prospectus dated April 29, 2004, the financial information concerning the assets, liabilities, financial position, and profit and loss of SUEZ has been provided for the last two fiscal years ended December 31, 2018 and 2019, and was prepared in accordance with European Regulation (EC) 1606/2002 of July 19, 2002 relating to the application of international accounting standards (IFRS). The Group's Consolidated Financial Statements for the year ended December 31, 2019 were prepared in accordance with IFRS as issued by the IASB and endorsed by the European Union[1].

The accounting standards applied in preparing the financial statements at December 31, 2019 are consistent with those applied in preparing the financial statements of December 31, 2018, with the exception of the items mentioned below in Note 1.2.1.

1.2.1 Standards, amendments and interpretations applied for annual periods beginning on January 1, 2019

The standards applied by the Group for the first-time starting January 1, 2019 are the following:

- IFRS 16 – Leases;
- IFRIC 23 – Uncertainty over Income Tax Treatments.

  Impacts of the application of these new standards are described in Note 1.2.3 and 1.2.4.
- Amendment to IFRS 9 – Prepayment features with negative compensation;
- Amendments to IAS 28 – Long-term interests in associates and joint ventures;
- Amendments to IAS 19 – Plan amendments, curtailments, and settlements;
- Annual improvements to IFRS, 2015-2017 cycle and resulting amendments.

Application of these standards and amendments does not have any major impact on the Group's Consolidated Financial Statements for the fiscal year ended December 31, 2019.

1.2.2 IFRS standards and amendments applicable after 2019 that the Group has elected not to early adopt

Amendments published by the IASB and adopted by the European Union

- Amendments to IAS 1 and to IAS 8 – Definition of materiality;
- Revised version of Conceptual Framework for Financial Reporting;
- Amendments to IFRS 9 and IFRS 7 – Interest Rate Benchmark Reform.

The Group will not early adopt these amendments. The analysis of the impact of their application is ongoing.

Standards and amendments published by the IASB and not yet adopted by the European Union

- Amendments to IFRS 3 – business combination – definition of a business.

1.2.3 Impacts of the first application of IFRS 16 standard – Leases

IFRS 16 took effect on January 1, 2019. It supersedes IAS 17 – Leases as well as IFRIC 4 – Determining whether an arrangement contains a lease, SIC 15 – Operating Leases – Incentives, and SIC 27 – Evaluating the substance of transactions involving the legal form of a lease.

IFRS 16 establishes principles for the measurement, accounting treatment and presentation of leases in the Consolidated Financial Statements.

IFRS 16 requires all leases, signed as lessee, to be accounted for in the consolidated statement of financial position, except in special cases. The lessee recognizes a right of use within non-current assets for each contract concerned, with the counterpart of a lease liability.

Until 31 December 2018, the Group accounted for its leases as a lessee either in the statement of financial position when the lease was a finance lease or in the income statement when the lease was an operating lease. Leases signed as lessee and outstanding in December 31, 2018 were primarily operating leases.

IFRS 16 has not caused, within the SUEZ Group, any change in the accounting treatment of contracts signed as a lessor.

The accounting principles applied to leases signed as lessee or lessor, respectively until December 31, 2018 and from January 1, 2019, are described in section 1.5.7.

(1) Available on the European Commission's website: http://ec.europa.eu/internal_market/accounting/index_en.htm

The impacts of the first application of IFRS 16 on the consolidated statement of financial position as of January 1, 2019 are as follows:

(in millions of euros)	Impact of the first application of IFRS 16
Non-current assets	
Rights of use	1,383.5
Total non-current assets	**1,383.5**
Current assets	
Other assets	(12.1)
Total current assets	**(12.1)**
Total assets	**1,371.4**
Total shareholder's equity	**–**
Non-current liabilities	
Lease liabilities	1,110.5
Total non-current liabilities	**1,110.5**
Current liabilities	
Lease liabilities	262.2
Trade and other payables	(1.3)
Total current liabilities	**260.9**
Total shareholder's equity and liabilities	**1,371.4**

SUEZ Group applies IFRS 16 by recognizing the cumulative retrospective impact of initial application as of January 1, 2019. Therefore, the Group considered that leases already in place as of December 31, 2018 took effect only starting from January 1, 2019 and that their remaining lease term corresponded to their residual term on that date. In accordance with the provisions of the simplified retrospective method as of January 1, 2019, the Group measured and recognized the cumulative retrospective effect of the initial application of this new standard as of January 1, 2019, without restating comparative information for the year 2018.

At the transition date January 1, 2019 SUEZ Group measured and recognized:

- lease liabilities at the present value of lease payments payable;
- right of use at the lease liability amount adjusted for prepaid rents or rents to be paid that have already been recognized in the statement of financial position as of December 31, 2018 immediately before the first-time adoption of IFRS 16 standard.

Initial application of IFRS 16 did not have an impact on SUEZ Group's shareholders' equity as of January 1, 2019.

The following simplification measures authorized by IFRS 16 were adopted on the transition date:

- SUEZ applied IFRS 16 to the agreements that the Group had previously identified as leases within the meaning of IAS 17 – Leases and IFRIC 4 – Determining Whether an Arrangement Contains a Lease;
- SUEZ has not applied IFRS 16 to agreements that the Group had not previously identified as containing a lease within the meaning of IAS 17 and IFRIC 4;
- leases whose residual term was less than or equal to 12 months were considered short-term leases and they are still recorded under expenses;
- SUEZ used the practical expedient of relying on the work carried out at December 31, 2018 to identify loss-making leases in application of IAS 37. Lease losses have an insignificant impact. The Group therefore did not carry out any impairment tests on rights of use at January 1, 2019.

Rights of use do not generate cash flows that are largely independent of those generated by other assets. Rights of use are therefore included in the carrying amount of each Cash Generating Unit at December 31 of each year. Impairment tests are performed at the level of these CGUs at that date. See Note 1.5.6.

Reconciliation between lease liability as of January 1, 2019 and off-balance sheet commitments as of December 31, 2018

The reconciliation between lease liabilities recognized in the consolidated statements of financial position as of January 1, 2019 and off-balance sheet commitments on lease payments to be made included in Note 20 to the Consolidated Financial Statements as of December 31, 2018 in accordance with IAS 17, breaks down as follows:

(in millions of euros)	
Off balance sheet commitments related to lease as of December 31, 2018	**1,338.9**
Impacts due to short-term leases	(24.6)
Impacts due to low value leases	(14.3)
Impacts of change in discount rate	(21.6)
Other impacts [a]	94.3
Lease liabilities as of January 1, 2019 after the first application of IFRS 16	**1,372.7**
Lease liabilities related to contracts previously classified as finance lease	87.2
Total lease liabilities as of January 1, 2019	**1,459.9**

(a) Includes adjustments related to a difference in the treatment of renewal or termination options, the service share on leases and contracts not identified in off-balance sheet commitments in 2018.

The lessee's weighted marginal borrowing rate applied to the rental liabilities recognized in the statements of financial position at the date of first application is 1.7%.

1.2.4 Impact of the first-time application of IFRIC 23 – Uncertainty over income tax treatment

Some positions that the SUEZ Group has taken with regard to income tax amounts may be uncertain, for instance because the content of local legislation may be subject to interpretation. IFRIC 23 requires calculating and recognizing income tax using the same calculation method the tax authorities will most likely use.

The SUEZ Group has applied IFRIC 23 as of January 1, 2019 partially retrospectively by recognizing the cumulative impact of the opening balance sheet for 2019 on shareholders' equity without adjusting comparative information during the initial application. Applying this interpretation as of January 1, 2019 did have an impact of -EUR 108.4 million on the Group's shareholders' equity and led to reclassifying provisions for risk related to corporate income tax under tax liabilities in "Other liabilities" in the consolidated statements of financial position for an amount of EUR 22.6 million.

1.2.5 Reminder of IFRS 1 transition options

The Group used some of the options available under IFRS 1 for its transition to IFRS in 2005. The options that continue to have an effect on the Consolidated Financial Statements are:

- translation adjustments: the Group elected to reclassify cumulative translation adjustments within equity in the consolidated reserves on January 1, 2004;
- business combinations: the Group elected not to restate business combinations that took place prior to January 1, 2004 in accordance with IFRS 3.

1.3 Measurement basis for preparation of the Consolidated Financial Statements

The Consolidated Financial Statements have been prepared using the historical cost convention, except for financial instruments that are accounted according to the financial instrument categories defined by IFRS 9.

1.4 Use of judgment and estimates

The economic and financial crisis continues, while the Group maintains its risk management procedures of its financial instruments. The significant market volatility caused by the crisis is taken into account by the Group in the estimates made such as for its business plans and in the various discount rates used in impairment testing and computing provisions.

1.4.1 Estimates

The preparation of the Consolidated Financial Statements requires the use of estimates and assumptions to determine the value of assets and liabilities, the disclosure of contingent assets and liabilities at the reporting date, as well as the revenues and expenses reported during the period.

Due to uncertainties inherent in the estimation process, the Group regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used by the Group in preparing the Consolidated Financial Statements relate mainly to:

- the measurement of the fair value of assets acquired and liabilities assumed in a business combination;
- the measurement of the recoverable amount of goodwill, property, plant and equipment and intangible assets (see Note 1.5.4.1 and 1.5.5);
- the measurement of financial instruments (see Note 1.5.9);
- the measurement of provisions, particularly for legal and arbitration proceeding and for pensions and other employee benefits (see Note 1.5.12);
- the measurement of unmetered revenue (see Note 1.5.13.1);
- the measurement of margin at termination relating to construction contracts (see Note 1.5.13.3);
- the measurement of capital renewal and replacement liabilities (see Note 1.5.13.4);
- the measurement of capitalized tax loss carry-forward (see Note 7).

1.4.1.1 Measurement of the fair value of assets acquired and liabilities assumed in a business combination

The fair value of the assets acquired and liabilities assumed is based on estimates and assumptions regarding in particular the expected market outlook and future cash flows as well as the discount rate to apply. The values used reflect management's best estimates.

1.4.1.2 Recoverable amount of goodwill, property, plant and equipment and intangible assets (see Notes 9, 10 and 11)

The recoverable amount of goodwill, intangible assets and property, plant and equipment is based on estimates and assumptions regarding in particular the expected market outlook and future cash flows associated with the assets and the discount rate to apply. Any change in these assumptions may have a material impact on the measurement of the recoverable amount and could result in adjustments to the impairment losses to be booked.

1.4.1.3 Estimates of provisions (see Note 18)

Parameters with a significant influence on the amount of provisions include the timing of expenditure and the discount rate applied to cash flows, as well as the actual level of expenditure. These parameters are based on information and estimates deemed to be appropriate by the Group at the current time.

To the Group's best knowledge, there is no information suggesting that the parameters used taken as a whole are not appropriate. Furthermore, the Group is not aware of any developments that are likely to have a material impact on the provisions booked.

1.4.1.4 Pensions and other employee benefit obligations (see Note 19)

Pension obligations are measured on the basis of actuarial calculations. The Group considers that the assumptions used to measure its obligations are appropriate and documented. However, any change in these assumptions may have a material impact on the resulting calculations.

1.4.1.5 Capital renewal and replacement liabilities (see Note 4.1.3)

This item includes concession operators' liabilities for renewing and replacing equipment and for restoring sites. The liabilities are determined by estimating the cost of renewing or replacing equipment and restoring the sites under concession (as defined by IFRIC 12), discounted each year at rates linked to inflation. The related expense is calculated on a contract-by-contract basis with probable capital renewal and site restoration costs allocated over the life of each contract.

1.4.1.6 Financial instruments (see Note 14)

To determine the fair value of financial instruments that are not listed on an active market, the Group uses valuation techniques that are based on certain assumptions. Any change in these assumptions could have a material impact on the resulting calculations.

1.4.1.7 Revenues (see Notes 3.2 and 4.1.1)

Revenues generated from customers whose consumption is metered during the accounting period are estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. The Group has developed measuring and modelling tools that allow it to estimate revenues with satisfactory degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the resulting revenues can be considered as not material. This estimated unmetered revenue is mainly due to the operating segment Water Europe.

1.4.1.8 Margin at termination relating to construction contracts (see Note 4.1.3)

The determination of total expected revenue and costs at termination involves significant estimates related to technical solutions, duration of project and contractual issues.

Management reassesses those estimates for the preparation of Consolidated Financial Statements on a quarterly basis or more frequently if required by significant new developments in the course of the projects. Any significant change in expected revenue or expected costs implies an immediate adjustment of the margin already recognized for the portion of the project already performed and impacts future margin for works still to be performed (See Note 1.5.13.3).

1.4.1.9 Measurement of capitalized tax loss carry-forwards (see Note 7)

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that future taxable profit will be available to the Group against which the tax loss carry-forwards can be utilized. The likelihood of future taxable profits is estimated taking into account the existence of temporary taxable differences from the same tax entity and is passed on to the same deadlines towards the tax authority as well as the estimates of future taxable profits. Estimates of taxable profit and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts as included in the medium-term business plan and, if necessary, on the basis of additional forecasts.

1.4.2 Judgment

As well as relying on estimates, the Group management also makes judgments to define the appropriate accounting treatment to apply to certain activities and transactions, when the effective IFRS standards and interpretations do not specifically deal with the related accounting issue.

In accordance with IAS 1, the Group's current and non-current assets and current and non-current liabilities are shown separately on the consolidated statement of financial position. For most of the Group's activities, the breakdown into current and non-current items is based on when assets are expected to be realized, or liabilities extinguished. Assets expected to be realized or liabilities extinguished within 12 months of the reporting date are classified as current, while all other items are classified as non-current.

1.5 Accounting policies

1.5.1 Scope and methods of consolidation

The consolidation methods used by the Group are the following:

- subsidiaries (over which the Group exercises exclusive control) are fully consolidated;
- joint operations over which the Group exercises joint control are consolidated in proportion to the direct rights to the assets and direct obligations for the liabilities of the entity;
- the equity method is used for:
  - joint ventures over which the Group exercises a joint control but has only rights to the net assets of the entity,
  - associate companies over which the Group exercises significant influence. In accordance with this method, the Group recognizes its proportionate share of the investee's net income or loss on a separate line of the consolidated income statement under "Share in net income of associates". The accounting policies applied by these companies comply with IFRS and are consistent with the accounting policies of the Group.

The Group analyses what type of control exists on a case-by-case basis, taking into account the situations illustrated in IFRS 10, IFRS 11 and IAS 28 revised.

All intercompany balances and transactions are eliminated in the Consolidated Financial Statements.

A list of the main fully consolidated companies together with the main investments accounted for by the equity method, is presented in Note 25 "List of the main consolidated companies at December 31, 2019 and 2018".

1.5.2 Foreign currency translation methods

1.5.2.1 Presentation currency of the Consolidated Financial Statements

The Group's Consolidated Financial Statements are presented in euros (EUR).

1.5.2.2 Functional currency

Functional currency is the currency of the primary economic environment in which an entity operates. In most cases, the functional currency corresponds to the local currency. However, certain entities may have a different functional currency from the local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

1.5.2.3 Foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing at the date of the transaction. At each reporting date:

- monetary assets and liabilities denominated in foreign currencies are translated at year-end exchange rates. The related translation gains and losses are recorded in the income statement for the year to which they relate;
- non-monetary assets and liabilities denominated in foreign currencies are recognized at the historical cost applicable at the date of the transaction.

1.5.2.4 Translation of the financial statements of consolidated companies with a functional currency other than the euro

The statement of financial position is translated into euros at year-end exchange rates. Income statement and statement of cash flow items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of consolidated companies are recorded under "Cumulative translation adjustment" as Other comprehensive income.

Goodwill and fair value adjustments arising from the acquisition of foreign entities are classified as assets and liabilities of those foreign entities. Therefore, they are denominated in the functional currencies of the entities and translated at the year-end exchange rate.

1.5.3 Business combinations

Business combinations accomplished before January 1, 2010 have been recognized in accordance with IFRS 3 prior to the revision. In accordance with IFRS 3 revised, these business combinations have not been restated.

Since January 1, 2010, the Group applies the purchase method as defined in IFRS 3 revised, which consists of recognizing at the acquisition date the identifiable assets acquired and liabilities assumed at their fair values, including any non-controlling interests in the acquired company. Non-controlling interests are measured either at fair value or at proportionate interest in the net identifiable assets. The Group determines on a case-by-case basis which measurement option is to be used to recognize non-controlling interests.

1.5.4 Intangible assets

Intangible assets are recognized at cost less any accumulated amortization and any accumulated impairment losses.

1.5.4.1 Goodwills

a) Recognition of goodwill

The application of IFRS 3 revised on January 1, 2010 requires the Group to identify business combinations carried out before or after that date.

Since January 1, 2010, goodwill is measured as being the amount by which the total of:

i. the consideration transferred;

ii. the amount of any non-controlling interest in the acquired company; and

iii. in a business combination achieved in stages, the fair value at acquisition-date of the previously held interests in the acquired company;

exceeds the accounting net balance of identifiable assets acquired and assumed liabilities.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the measurement period.

Goodwill relating to associates and joint ventures are recorded respectively under "Investments in associates" and "Investments in joint ventures".

b) Measurement of goodwill

Goodwill is not amortized but is tested for impairment once a year, or more frequently when an indication of impairment is identified. Impairment tests are carried out at the level of cash-generating units (CGUs), which constitute groups of assets generating cash inflows that are largely independent of the cash inflows from other cash-generating units.

The methods used to carry out these impairment tests are described in Note 1.5.6 "Impairment of property, plant and equipment and intangible assets".

Impairment losses in relation to goodwill cannot be reversed and are shown under "Impairment" in the income statement.

Impairment losses on goodwill relating to associates and joint ventures are respectively reported under "Share in net income (loss) of associates" and "Share in net income (loss) of joint ventures".

1.5.4.2 Other intangible assets

a) Development costs

Research costs are expensed as incurred.

Development costs are capitalized when the asset recognition criteria set out in IAS 38 are met. Capitalized development costs are amortized over the useful life of the intangible asset recognized.

In view of the Group's activities, capitalized development costs are not material.

b) Other internally generated or acquired intangible assets

Other intangible assets include mainly:

- amounts paid or payable as consideration for rights relating to concession arrangements or public service contracts;
- customer portfolios acquired on business combinations;
- surface and underground water drawing rights, which are not amortized as they are granted indefinitely;
- concession assets;
- exclusive rights to distribute drinking water in a defined geographic area in perpetuity;
- softwares.

Intangible assets are amortized on the basis of the expected pattern of consumption of the expected future economic benefits embodied in the asset. If this cannot be reliably calculated, the straight-line method is used, as a function of the useful lives presented in the table below:

Useful life *(in years)*	Minimum	Maximum
Concession rights – duration of contracts	10	50
Customer portfolios	10	25
Other intangible assets	1	40

Some intangible assets (water rights, etc.) with an indefinite useful life are not amortized but are subject to an annual impairment test.

1.5.5 Property, plant and equipment

1.5.5.1 Property, plant and equipment – initial measurement and subsequent measurement

Items of property, plant and equipment are recognized at their historical cost of acquisition, production or entry to the Group, less any accumulated depreciation and any accumulated impairment losses.

The carrying amount of these items is not revalued as the Group has elected not to apply the allowed alternative method, which consists of regularly revaluing one or more categories of property, plant and equipment.

Investment subsidies are deducted from the gross value of the assets concerned under the heading they were received.

In accordance with IAS 16, the initial cost of the item of property, plant and equipment includes an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, when the entity has a present legal or constructive obligation to dismantle the item or restore the site. In counterpart, a provision is recorded for the same amount.

The Group applies IAS 23, which consists in capitalizing borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset.

1.5.5.2 Depreciation

In accordance with the components approach, the Group uses different depreciation terms for each significant component of a sole tangible asset when one of these significant components has a different useful life from that of the main tangible asset to which it relates.

Depreciation is calculated on a straight-line basis over normal useful lives.

The range of useful lives is due to the diversity of the assets and contractual terms in each category. The shortest periods relate to smaller equipment and furniture, while the longest useful lives concern network infrastructure.

Standard useful lives are as follows:

Main depreciation periods *(in years)*

Constructions [a]	3 to 100
Plant and equipment	2 to 70
Transport equipment	3 to 14

(a) Including fittings.

With respect to the assets accounted for as counterpart for the site restoration provisions, they are amortized according to the method set forth in Note 18.4.

1.5.6 Impairment of property, plant and equipment and intangible assets

In accordance with IAS 36, impairment tests are carried out on intangible assets and on property, plant and equipment whenever there is an indication that the assets may be impaired. Such indications may be based on events or changes in the market environment, or on internal sources of information. Intangible assets that are not amortized are tested for impairment annually.

Impairment indicators

This impairment test is only carried out for property, plant and equipment and intangible assets for the defined useful lives when there are signs of an alteration in their value. In general, this arises as a result of significant changes in the operational environment of the assets or from a poorer than expected economic performance.

The main indications of impairment used by the Group are:

- external sources of information:
  - significant changes in the economic, technological, political or market environment in which the entity operates or to which the asset is dedicated,
  - fall in demand;
- internal sources of information:
  - evidence of obsolescence or physical damage not budgeted for in the depreciation/amortization schedule,
  - worse-than-expected performance.

Impairment

Items of property, plant and equipment or intangible assets are tested for impairment at the level of the individual asset or cash-generating unit as appropriate, determined in accordance with IAS 36. If the recoverable amount of an asset is lower than its carrying amount, the carrying amount is reduced to the recoverable amount by recording an impairment loss. Upon recognition of an impairment loss, the depreciable amount – and possibly the useful life – of the asset concerned is revised.

Impairment losses recorded in relation to property, plant and equipment or intangible assets may be subsequently reversed if the recoverable amount of the assets is once again higher than their carrying value. The increased carrying amount of an item of property, plant or equipment attributable to a reversal of an impairment loss may not exceed the carrying amount that would have been determined (net of depreciation/amortization) had no impairment loss been recognized in prior periods.

Measurement of recoverable amount

In order to review the recoverable amount of property, plant and equipment and intangible assets, the assets are, where appropriate, grouped into cash-generating units (CGUs) and the carrying amount of each unit is compared with its recoverable amount.

For operating entities which the Group intends to hold on a long-term and going concern basis, the recoverable amount of a CGU corresponds to the higher of its fair value less costs to sell and its value in use. Value in use is primarily determined based on the present value of future operating cash flows and a terminal value. Standard valuation techniques are used based on the following main economic data:

- discount rates based on the specific characteristics of the operating entities concerned;
- terminal values in line with the available market data specific to the operating segments concerned and growth rates associated with these terminal values, not to exceed inflation.

Discount rates are determined on a post-tax basis and applied to post-tax cash flows. The recoverable amounts calculated on the basis of these discount rates are the same as the amounts obtained by applying the pre-tax discount rates to cash flows estimated on a pre-tax basis, as required by IAS 36.

For operating entities which the Group has decided to sell, the related carrying amount of the assets concerned is written down to the estimated market value less costs of disposal. When negotiations are ongoing, this is determined based on the best estimate of their outcome as of the reporting date.

In the event of a decline in value, the impairment loss is recorded in the consolidated income statement under "Impairment".

1.5.7 Leases

1.5.7.1 SUEZ 's accounting methods of the lessee

Leases that the Group signed as the lessee mainly pertain to real estate assets, vehicles and construction machinery. The duration of the contracts is highly variable depending on the nature of the leased assets.

Accounting methods used up to December 31, 2018

In 2018, before applying IFRS 16, the Group classified its leases as finance leases if it had acquired almost all risks and benefits related to ownership of the leased assets if not, they were classified as operating leases.

The main indicators examined by the Group in order to assess whether a lease transfers substantially all risks and benefits of ownership were as follows: existence of an automatic transfer of ownership clause or an option to transfer ownership clause and conditions for exercising this option, comparison between the term of the lease and the estimated useful life of the asset, specific nature of the asset used, and a comparison of the present value of future payments under the lease with the fair value of the asset.

On the effective date of the finance leases the present value of the minimum future payments to be made was calculated and recognised as a financial debt by the counterpart of a tangible fixed asset.

After the effective date:

- tangible fixed asset was amortized on a straight-line basis over the term of the lease;
- financial debt was increased by financial interest and decreased by the amount of rentals paid.

Payments made under operating leases were recognized as an operating expense in the income statement on a straight-line basis over the term of the leases. Future lease payments were not recognized in the statement of financial position nor in the income statement; they were identified in a note to the annual Consolidated Financial Statements.

Accounting methods used since January 1, 2019

Since January 1, 2019, the lessee applies a single accounting model which consists of recording the following items on the date a given lease takes effect:

- a lease liability under liabilities in the statement of financial position;
- a right to use the leased assets under assets;
- depreciation of the right of use in the income statement;
- interest in the income statement and principal payments under lease liability, with the sum of these payments corresponding to lease payments made to the lessor.

Lease liability equals the present value of future rent to be paid.

Lease payments included in this liability calculation include fixed lease payments, in-substance fixed lease payments or unavoidable payments, variable lease payments that fluctuate solely due to an index or rate, the exercise price of a purchase option if the Group is reasonably certain to exercise it, or early termination penalties if the remaining duration of the lease takes into account this event.

Variable lease payments, which fluctuate depending on how much the leased assets are used, are recognized in operating expenses during the period that the event or condition that triggered the obligation occurred. Their total amount for the year 2019 is shown in Note 15.

IFRS 16 recommends that future lease payments to be paid be discounted using the interest rate implicit in the lease (IRIL) if it is possible to easily determine this rate, or if not, using the incremental borrowing rate (IBR) of the entity that has the concerned leases.

The Group cannot easily determine the interest rate implicit in the leases. As a result, SUEZ used incremental borrowing rates from the different entities with leases to calculate the Group's lease liability. The interest rates used are those for amortized debt.

After the leases take effect, the lease liabilities will increase due to interest but decrease by the amount of lease payments made.

The book values of the liabilities are re-estimated each time a lease contract is amended or events or circumstances significantly change, leading to a change in:

- the remaining duration of the lease;
- the number or type of assets leased;
- the amount of lease payments;
- the estimate of exercising a purchase option on a leased asset.

The Group recognizes rights of use at their initial cost on the date the leases take effect.

The initial cost of rights of use primarily include the lease liability amount, initial direct incremental costs that have been paid to obtain the leases and pre-paid lease payments, less incentives received from lessors at the beginning of the leases.

After the rights of use take effect, they are amortized on a straight-line basis over the remaining duration of the leases. As an exception to this rule, a right of use is amortized over the useful life of the leased asset when the SUEZ Group is reasonably certain it will exercise a purchase option on the asset.

The book value of the rights of use is adjusted when the lease liability is remeasured.

The rights of use are impaired when there is indication that their Cash Generating Unit has undergone a loss of value in accordance with the same criteria as those applied to other depreciable fixed assets.

Exemptions

The Group has opted to take the exemptions set forth in IFRS 16, meaning it will not apply the single accounting model for the following types of leases:

- lease payments for leases of less than or equal to 12 months if these leases do not include purchase options on the leased assets;
- lease payments on leases that pertain to assets with a unit replacement value of less than EUR 5,000;
- SUEZ has recorded a right of use and a lease liability for all transportation equipment leases signed by the Group as lessee, including maintenance expenses and vehicles maintenance. However, as the Group has not applied this simplification to leases on other types of leased assets, only the rental components of these agreements have been restated.

Lease payments that fall under these exemptions remain accounted for under operating expenses as of December 31, 2019. They are presented in Note 15.

Judgment used to determine the remaining duration of leases

The remaining duration of leases according to IFRS 16 corresponds to their lease term plus:

- the lease's renewal period if the agreement includes a renewal option for the lessee and the lessee is reasonably certain to use it;
- the period that the lessee can opt to terminate the agreement if the lessee is reasonably certain it will not use this option.

The SUEZ Group has the right to opt for renewal or termination on certain leases it has signed as lessee, and uses its judgment to determine if there are strong economic incentives to exercise them.

After a lease takes effect, the Group reassesses its remaining lease term if a significant change in circumstances takes place and it is:

- under SUEZ's control;
- and which leads the Group to now be reasonably certain it will exercise an option that had not been considered when the remaining lease term was initially determined; or which leads the Group to no longer be reasonably certain it will exercise an option that it had initially considered.

The Group carries out fixtures and fittings in premises that it rents as a lessee. The amortization period of these fixtures and fittings is at most equal to the term of the lease contracts concerned.

The enforceable period of a contract ends when the lessee and the lessor each have the right to terminate the lease without the permission of the other party and without incurring more than a negligible penalty.

The IFRIC, the IFRS interpretation committee, established at the end of November 2019 that the penalties to be taken into account in determining the term of a contract include economic penalties, in particular the net book value of fixtures and fittings inseparable from the leased assets, which SUEZ has paid, and which SUEZ would lose if it terminated the lease.

The analysis of the possible impact of this IFRIC decision is ongoing.

1.5.7.2 SUEZ's accounting methods as a lessor

Leases signed by SUEZ as the lessor mainly pertain to seawater desalination facilities and water filtration equipments.

The application of IFRS 16 to leases signed as the lessor have the same impacts as of January 1, 2019 as leases recognized up to December 31, 2018.

The lessor analyzes its leases to determine if they are operating leases or finance leases. For finance leases, the lessor transfers almost all risks and benefits related to owning the leased assets to the lessee. All leases that do not fall under this definition of a finance lease are operating leases.

Examples of situations that individually or jointly lead the lessor to classify a lease as a finance lease are as follows:

- the lease results in transferring ownership of the leased asset at the end of the term;
- the lessee has the option to buy the leased asset at a price that should be sufficiently less than its fair value on the date the option becomes exercisable so that when the lease ends, the Group will be reasonably certain the purchase option will be carried out;
- the term of the lease covers most of the useful life of the leased asset;
- as of the signing date of the lease, the present value of future lease payments to be received amounts to at least almost all of the fair value of the leased asset.

Given these criteria, all agreements signed by SUEZ Group as the lessor are operating leases.

The Group recognizes rental income on a straight-line basis under operating income.

The leased assets are isolated within the Group's property, plant and equipment line item, and depreciated over their useful life. They undergo impairment tests if a trigger event on the concerned Cash Generating Unit is identified.

Lease contracts generally include clauses that oblige the customer to remunerate SUEZ for maintenance services on the leased assets. These services reduce the risk of a rapid decline in the residual value of the assets. In less frequent cases where SUEZ does not perform these services, the customer is contractually obliged to perform maintenance or to have maintenance performed by a third party throughout the term of the contracts.

Until December 31, 2018, IFRIC 4 determined the accounting treatment of "take-or-pay" service or sales contracts that did not take the legal form of a lease, but which gave SUEZ customers or suppliers the right to use an asset or set of assets in return for fixed payments. The contracts thus identified were assimilated to leases and had to be analysed as such in order to qualify either as operating leases or finance leases. The Group was concerned by this interpretation in respect of certain contracts signed with industrial or public-sector customers for assets financed by the Group.

IFRS 16 standard now replaces IFRIC 4 standard in very similar terms. Such contracts continue to be accounted for as leases within the Group as soon as they give the Group's customer control over the use of a specific asset throughout their term, in return for payment of a consideration.

1.5.8 Inventories

Inventories are measured at the lower of cost and net realizable value. Net realizable value corresponds to the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories is determined based on the first-in, first-out method or the weighted average cost formula.

1.5.9 Financial instruments

Financial instruments are recognized and measured in accordance with IFRS 9.

1.5.9.1 Classification, valuation and impairment of financial assets

Financial assets mainly comprise cash and cash equivalent instruments, or rights to receive cash, or equity instruments of other entities.

They are listed as follows:

- assets whose cash flows are not interests and principal repayments (equity interests in non-consolidated entities, derivative instruments);
- assets whose cash flows are interests and principal repayments (primarily loans and receivables);
- cash and cash equivalent instruments.

Financial assets are broken down into current and non-current assets in the statement of financial position.

a) Equity interests in non-consolidated entities

SUEZ Group's investments in non-consolidated companies are classified as either:

- equity instruments measured at fair value through income. This category mainly includes listed securities held in companies in which the SUEZ Group does not hold a significant influence; or
- equity instruments measured at fair value through other comprehensive income following an irrevocable option taken by the SUEZ Group, security by security, and from the first recognition. This category mainly includes unlisted securities held in companies in which the Group does not have significant influence.

In accordance with IFRS 9, equity instruments are recognized:

- at their initial cost plus transaction costs when they are measured at fair value through other items of comprehensive income;
- at their initial cost when they are measured at fair value through income. Transaction costs are then recorded on the income statement at the acquisition date.

At each closing, the Group's equity investments in non-consolidated companies are measured and recognized at their fair value. For listed companies, fair value is determined based on the quoted market price at the relevant closing date. For unlisted securities, fair value is measured using valuation models based primarily on the latest market transactions, discounted dividends, cash flows, or failing that, using net book value.

In accordance with IFRS 9:

- all impacts related to instruments measured at fair value through income generated after their vesting date are recognized in the income statement: dividends, positive or negative differences between the fair value and acquisition price throughout the entire time the securities are held, gains or losses on disposals;
- by contrast, impacts related to instruments measured at fair value through other items of comprehensive income are never recycled in the income statement. The positive or negative differences between fair value and acquisition price are recorded in other items of comprehensive income as long as the instruments are held. Gains and losses on disposals are classified in other items of comprehensive income, then the cumulative total of other items of comprehensive income related to the line of sold securities is reclassified to consolidated reserves. Only dividends received impact the Group's revenue;
- there is no impairment recognition for of the Group's investments in non-consolidated companies.

b) Derivative instruments

Derivative instruments are measured and recognized at their fair value; compensation for changes in fair value is recognized in the income statement, unless the derivative instruments are used as cash flow hedges or net investment hedges (see section 1.5.9.3).

c) Loans and receivables carried at amortized cost

The category mainly includes loans and receivables attached to investments, advances granted to associates or non-consolidated companies, guarantee deposits, long-term receivables from customers for concession contracts (see section 1.5.13.4) as well as trade and other receivables less than one year.

On initial recognition, these loans and receivables are recorded at fair value plus transaction costs, which generally corresponds to their nominal value. Then, at each reporting date, these assets are measured at amortized cost using the effective interest rate method.

In accordance with the terms and conditions of IFRS 9, SUEZ Group entities have started using an impairment approach per type of asset for counterparty risk.

Regarding trade receivables and lease receivables, they have constituted non-recovery risk matrices for each homogeneous category of customer, adapted to their local realities, in light of the default rates observed in the recent past on receivables with a similar credit risk profile. They update their matrices at least once a year. They use these matrices to calculate impairments now based on the expected default rates on each of the homogeneous categories of customers.

For loans related to investments, current account advances to associates and deposits and guarantees, impairment losses are calculated on the basis of expected losses on assets taken individually.

These assets are classified into three categories:

- situation 1: Assets whose credit risk has not significantly deteriorated and debtors pay on time or with delays of less than 60 days;
- situation 2: Assets that have suffered material credit risk deterioration with overdue payments of between 60 and 180 days;
- situation 3: Assets that have deteriorated to the point where the loss has occurred, with overdue payments exceeding 180 days.

Assets classified under situation 1 are subject to impairment for expected losses up to 12 months. Assets classified under situation 2 or 3 are subject to impairment for expected losses for their entire useful life. The amount of impairment is calculated based on:

- the likelihood of default of the debtor;
- the estimated loss rate if the counterparty defaults applied to the total value of the asset.

Impairment on loans related to investments, current account advances to associates and deposits and guarantees are calculated on the basis of expected losses on assets taken individually.

Receivables arising from concession contracts, when SUEZ Group has obtained an unconditional right to receive cash, contain a financing component within the meaning of IFRS 15 since customers pay over several years for a service already provided by the Group. As authorized by IFRS 9, the impairment method used to calculate impairment losses on loans and advances on current accounts and described above has been applied to these receivables.

Gross values of receivables are transferred to unrecoverable losses on receivables on the income statement when all avenues offered to the SUEZ Group to recover the assets have been exhausted. Accumulated impairment less receivables concerned are then also transferred to the income statement.

Contracts assets concluded with customers include amounts due from customers under construction contracts. The calculation method used is described in Note 1.5.13.3. These assets are subject to an impairment test using the same rules as trade receivables.

d) Cash and cash equivalents

The cash and cash equivalents line item includes cash as well as short-term investments that are considered to be readily convertible into a known amount of cash and where the risk of a change in their value is deemed to be negligible based on the criteria set out in IAS 7 and held in order to meet short-term cash commitments.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under short-term borrowings on the statement of financial position.

1.5.9.2 Classification, valuation of financial liabilities

Financial liabilities include borrowings (of which bank overdrafts), trade and other payables, derivative financial instruments, and other financial liabilities.

Financial liabilities are broken down into current and non-current liabilities in the statement of financial position. Current financial liabilities primarily comprise:

- financial liabilities with a settlement or maturity date within 12 months of the closing date;
- derivative financial instruments qualifying as fair value hedges;
- all derivative financial instruments not qualifying as hedges.

a) Measurement of borrowings and other financial liabilities

Borrowings and other financial liabilities are measured at amortized cost using the effective interest rate method.

On initial recognition, any issue premiums/discounts, redemption premiums/discounts and issuing costs are added to/deducted from the nominal value of the borrowings concerned. These items are taken into account when calculating the effective interest rate and are therefore recorded in the consolidated income statement over the life of the borrowings using the amortized cost method.

SUEZ Group treats restructurings of financial debts that do not take place between identical lenders and borrowers as an extinction of the initial debt and an acknowledgement of the new debt.

Similarly, a renegotiated debt whose value of cash flows under the new conditions (including fees paid to the counterparty bank, discounted using the initial effective interest rate) differs by more than 10% from the present value of the remaining cash flows of the initial financial liability is also considered to be an extinguishment of debt and the recognition of new debt, since the contractual amendment is substantive under IFRS 9. At this time, the initial debt is considered as extinguished and therefore derecognized and all fees related to the former and not yet amortized debt are transferred to the income statement.

When the change is not substantive under IFRS 9, the initial debt remains recognized in the statements of financial position, including any related fees not yet amortized.

However, the Group reassess the carrying amount of the debt with the new future cash flows expected over its remaining period in order to comply with the standard. The effect of the reassessment is recognized in the income statement.

b) Call options on non-controlling interests granted before January 1, 2010

Other financial liabilities primarily include put options on non-controlling interests granted by the Group. As no specific guidance is provided by IFRS and in view of the AMF (French Financial Market Authority) recommendations for year-end 2009, the Group has adopted the following accounting treatment for these commitments:

- when the put option of a non-controlling interest is initially granted, the present value of the exercise price is recognized as a financial liability, with a corresponding reduction in non-controlling interests. When the value of the put option is greater than the carrying amount of the non-controlling interests, the difference is recognized as goodwill;
- at each reporting date, the amount of the financial liability is revised and any changes in the amount are recorded with a corresponding adjustment to goodwill;
- payments of dividends to non-controlling interests result in an increase in goodwill;
- in the income statement, non-controlling interests are allocated their share in income. In the statement of financial position, the share in income allocated to non-controlling interests reduces the carrying amount of goodwill. No finance costs are recognized in respect of changes in the fair value of liabilities recognized against goodwill.

1.5.9.3 Derivatives and hedge accounting

The Group uses financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices. Use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks.

a) Definition and scope of derivative financial instruments

Derivative financial instruments are contracts whose value changes in response to the change in one or more observable variables that do not require any material initial net investment and that are settled at a future date.

Derivative instruments therefore include swaps, options and futures.

b) Derivative hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as:

- a fair value hedge of an asset or liability;
- a cash flow hedge;
- a hedge of a net investment in a foreign operation.

Fair value hedges

A fair value hedge is defined as a hedge of the exposure to changes in fair value of a recognized asset or liability, such as a fixed-rate loan or borrowing, or of assets, liabilities or an unrecognized firm commitment denominated in a foreign currency.

The gain or loss from re-measuring the hedging instrument at fair value is recognized in income. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is also recognized in income even if the hedged item is in a category in respect of which changes in fair value are recognized through Other comprehensive income, or if it is normally recognized at amortized cost in the absence of hedging. These two adjustments are presented net in the income statement, with the net effect corresponding to the ineffective portion of the hedge.

Cash flow hedges

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect the Group's consolidated income. The hedged cash flows may be attributable to a particular risk associated with a recognized financial or non-financial asset or a highly probable forecast transaction.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in Other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in shareholders' equity are reclassified to the income statement, under the same caption as the loss or gain on the hedged item – *i.e.* current operating income for operating cash flows and financial income/expense for other cash flows – in the same periods in which the hedged cash flows affect income.

If the hedging relationship is discontinued, in particular because the hedge is no longer considered effective, the cumulative gain or loss on the hedging instrument remains separately recognized in shareholders' equity until the forecast transaction occurs. However, if a forecast transaction is no longer highly probable, the cumulative gain or loss on the hedging instrument is recognized in income.

Hedging of a net investment in a foreign entity

In the same way as for a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge of the currency risk is recognized directly in Other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in Other comprehensive income are transferred to the consolidated income statement when the investment is sold or liquidated.

c) Identification and documentation of hedging relationships

The Group identifies the hedging instrument and the hedged item at the inception of the hedge and formally documents the hedging relationship by identifying the hedging strategy, the hedged risk and the method used to assess the effectiveness of the hedge. Only derivatives traded with counterparties outside of the Group are considered eligible for hedge accounting.

This methodology complies with IFRS 9.

From the outset and on an ongoing basis during all periods for which hedging has been designated, the Group demonstrates and documents the effectiveness of the hedging relationship.

In accordance with IFRS 9, hedges are considered effective when:

- there is an economic relationship between the hedged item and the hedging item. This relationship exists when the characteristics of the hedging instrument (notional amount, maturity date) are highly correlated with the hedged item, and/or when the change in the value of the hedging instrument itself strongly correlates to the change in value of the item hedged;
- the hedging ratio is consistent with the risk management strategy of the Company that is hedging the hedged item;
- the value of the hedging instrument is largely unrelated to the debtor's credit risk.

The hedge effectiveness has been demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or in cash flows between the hedging instrument and the hedged item. Methods based on an analysis of statistical correlations between historical price data are also used by the Group.

d) Derivative instruments not qualifying for hedge accounting: recognition and presentation

These items mainly concern derivative financial instruments used in economic hedges that have not been – or are no longer – documented as hedging relationships for accounting purposes.

When a derivative financial instrument does not qualify or no longer qualifies for hedge accounting, changes in fair value are recognized directly in income, under "Mark-to-Market on commodity contracts other than trading instruments", in current operating income for derivative instruments with non-financial assets as the underlying, and in financial income or expenses for currency, interest rate and equity derivatives.

Derivative expiring in less than 12 months are recognized in the consolidated statement of financial position in current assets and liabilities, while derivatives expiring after this period are classified as non-current items.

e) Measurement of fair value

The fair value of listed instruments on an active market is determined based on the market price. In this case, these instruments are presented at Level 1 of the fair value measurement.

The fair value of non-listed financial instruments for which there is observable market data is determined by using valuation techniques such as the valuation models applied for options, or by using the discounted cash flows method. The counterparty risk is taken into account when valuing derivative contracts.

The models used to value these instruments include assumptions based on market data in accordance with IFRS 13:

- the fair value of interest rate swaps is calculated based on discounted future cash flows;
- the fair value of forward exchange contracts and currency swaps is calculated based on current prices for contracts with similar maturity profiles by discounting the differential of future cash flows (the difference between the forward price of the contract and the recalculated forward price based on new market conditions applied to the nominal amount);
- commodity derivatives are valued as a function of market quotes based on discounted future cash flows (firm contracts: commodity swaps or commodity forwards), and option valuation models (optional contracts) for which it may be necessary to observe market price volatility. For contracts with maturity exceeding the depth of transactions for which prices are observable, or that are particularly complex, valuations may be based on internal assumptions;
- for complex contracts entered into with independent financial institutions, the Group uses valuations carried out by counterparties, on an exceptional basis.

These instruments are presented in Level 2 of the fair value measurement hierarchy, unless their valuation depends significantly on non-observable parameters. In this case, they are presented at Level 3 of the fair value measurement hierarchy. These largely involve derivative financial instruments with maturities exceeding the observable horizon for the forward prices of the underlying asset, or for which certain parameters, such as underlying volatility, are not observable.

1.5.10 Treasury shares

Treasury shares are recognized at cost and deducted from equity. Gains and losses on disposal of treasury shares are directly recorded in equity and do not therefore impact income for the period.

1.5.11 Share-based payments

Under IFRS 2, the Group is required to recognize an expense (personnel costs) corresponding to benefits granted to employees in the form of share-based payments, in consideration for services provided. These services are valued at the fair value of the instruments awarded.

This payment may take the form of instruments paid in shares or in cash.

1.5.11.1 Equity-settled instruments

Allotment of bonus shares

The fair value of bonus share plans is estimated based on the share price on the allotment date, taking into account the absence of dividend payments over the vesting period, the turnover rate for the relevant staff in each plan and the likelihood of the Group's performance. The estimation of the fair value of the plans also takes into account the non-transferability period associated with these instruments. The cost is expensed over the vesting period of the rights and offset against equity. For performance shares that are allotted on a discretionary basis and include external performance conditions, a Monte Carlo model is used.

Employee share purchase plans

Employee share purchase plans enable employees to subscribe to Company shares at a lower-than-market price. The fair value of the instruments awarded under employee share purchase plans is estimated on the allotment date based on the value of this discount awarded to employees and non-transferability period applicable to the share subscribed. As it is treated as a service rendered, the cost is recognized in full and offset against equity.

1.5.11.2 Cash-settled instruments

In specific cases where local legislation prohibits employee share purchase plans, Share Appreciation Rights (SAR) are granted instead. When these instruments are settled in cash, their fair value is recognized in expenses over the vesting period, with an offsetting entry recorded in employee-related liabilities. Changes in the fair value of the liability are taken to income for each fiscal year.

The long-term incentive plan, which will result in a cash payment to the beneficiary, is valued at its fair value and an expense is recognized on a straight-line basis over the term of the plan.

1.5.12 Provisions

1.5.12.1 Provisions for post-employment benefit obligations and other long-term benefits

Depending on the laws and practices in force in the countries where SUEZ operates, Group companies have obligations in terms of pensions, early retirement payments, retirement bonuses and other benefit plans. Such obligations generally apply to all of the employees within the companies concerned.

The Group's obligations in relation to pensions and other employee benefits are recognized and measured in accordance with IAS 19 revised. Accordingly:

- the cost of defined contribution plans is expensed based on the amount of contributions payable in the period;
- the Group's obligations concerning pensions and other employee benefits payable under defined benefit plans are assessed on an actuarial basis. These calculations are based on assumptions relating to mortality, staff turnover and estimated future salary increases, as well as the economic conditions specific to each country or subsidiary of the Group. Discount rates are determined by reference to the yield, at the measurement date, on high-quality corporate bonds in the related geographical area (or on government bonds in countries where no representative market for such corporate bonds exists).

Provisions are recorded when commitments under these plans less the unrecognized past service cost exceed the fair value of plan assets. When the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under "Other current assets" or "Other non-current assets".

As regards post-employment benefit obligations, the Group recognizes actuarial gains and losses resulting from changes in actuarial assumptions and experience adjustments directly to Other comprehensive income (equity) items. Where appropriate, adjustments resulting from applying the asset ceiling to net assets relating to overfunded plans are treated in a similar way.

However, actuarial gains and losses on other long-term benefits such as long-service awards, continue to be recognized immediately in income.

The net interest expense (income) in respect of pensions is presented as a "financial result".

1.5.12.2 Other provisions

The Group records a provision where it has a present obligation (legal or constructive), the settlement of which is expected to result in an outflow of resources embodying economic benefits with no corresponding consideration in return.

A provision for restructuring costs is recorded when the general criteria for setting up a provision are met, *i.e.*, when the Group has a detailed formal plan relating to the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Provisions with a maturity of over 12 months are discounted when the effect of discounting is material. The Group's main long-term provisions, excluding the provisions for post-employment benefit obligations, are provisions for site restoration costs (relating to the waste services business). The discount rate (or rates) used reflect current market measurements of the time value of money and the risks specific to the liability concerned. Expenses corresponding to the reversal of discounting adjustments to long-term provisions are recorded under other financial income and expenses.

A provision is recognized when the Group has a present legal or constructive obligation to restore a site. The counterpart for this provision is included in the carrying amount of the asset concerned. Adjustments to the provision due to subsequent changes in the expected outflow of resources, the site restoration date or the discount rate are deducted from or added to the cost of the corresponding asset in a symmetrical manner. The impacts of unwinding the discount are recognized in expenses for the fiscal year.

1.5.13 Revenues

Revenues correspond to proceeds from contracts signed with customers. They are calculated and recognized using IFRS 15 principles.

SUEZ determines performance obligations included in the contracts signed with customers. Most contracts only include one performance obligation.

When contracts include both a construction activity and facility operation activity, two performance obligations are distinguished. Total revenues related to the contract are then divided up between the construction and operations activities in accordance with IFRS 15.

The SUEZ Group only recognizes the variable portion of revenue, depending on the degree of achievement of contractual objectives (bonuses or penalties), if it is highly unlikely that there will be a material downward adjustment in future accounting periods.

The SUEZ Group recognizes its revenues when transferring control of goods or services promised to the customer, which happens either at delivery (*i.e.* when control is transferred to the buyer) or on an ongoing basis (services and construction activities recognized as the project progresses) often under long-term contracts.

SUEZ only recognizes revenues generated by its co-contracting parties as main operator if:

- the Group bears the main responsibility in managing and completing the overall service;
- the Group made a significant effort to integrate various work carried out by co-contracting parties; and
- the Group made significant efforts in technical supervision so the Group could take total control of the goods or services carried out before transferring control over to the customer.

The Group's revenue includes products related to the following business lines:

- Water Services;
- Waste Services;
- Engineering and construction contracts and other services.

1.5.13.1 Water Services

As of December 31, 2019, as during previous fiscal years, revenues are based on volumes delivered to the customer in the water distribution business, whether these volumes resulted in specific invoicing ("statement") or are estimated based on the output of the supply networks. As authorized by IFRS 15 and by simplification, revenues correspond to volumes delivered multiplied by a price per m^3 (see Note 1.4.1.7).

With regard to the wastewater services and wastewater treatment, the price of the service is either included in the water distribution bill or is invoiced specifically to the local authority or industrial customer.

The revenue recognition rules for concession contracts are detailed in Note 1.5.13.4.

1.5.13.2 Waste Services

As of December 31, 2019, as during previous fiscal years, revenues are recorded:

- depending on the tonnages collected and the service provided by the SUEZ Group, in the waste collection activity;
- depending on the volumes of waste treated and the additional income from waste recovery, in incineration (sale of heat and power in particular) and sorting (sale of raw materials – paper, cardboard, glass, metals, plastics).

As authorised by IFRS 15 and by simplification, revenues correspond to the tonnages of waste treated multiplied by a price per metric tonne.

The revenue recognition rules for concession contracts are detailed in Note 1.5.13.4.

1.5.13.3 Engineering, construction contracts and other services

As of December 31, 2019, as during previous fiscal years, revenues are recognized using the percentage of completion method for engineering, construction and equipment sales activities.

When it is probable that total direct unavoidable contract costs will exceed the total economic benefits expected to be received from the contract, the Group recognizes expected loss at termination as an expense immediately. Potential losses at completion are calculated at the contract level in accordance with IAS 37 and not for each performance obligation.

Partial payments received under construction contracts before the corresponding work has been carried out are recorded on the liabilities side of the statement of financial position as advances received under contracts liabilities (see also section 1.5.15).

The difference between the cumulative amount of revenues recognized and intermediary billing is measured. If this difference is positive, it is recognized under "Amount due from customers under construction contracts" within contracts assets (see section 1.5.15). If this difference is negative, it is recognized under "Amount due to customers under construction contracts" within contracts liabilities.

1.5.13.4 Concession contracts

A significant part of the business activities in the Water and Waste businesses is conducted under concession contracts, especially for operating drinking water production and distribution facilities, wastewater treatment facilities or waste incineration facilities.

18

SIC 29 – Service Concession Arrangements: Disclosures deals with information about concession agreements to be disclosed in the Notes to the financial statements.

IFRIC 12 is the interpretation that specifies the common characteristics of concession agreements:

- the grantor, usually a public authority, is required to provide a public service that it delegates to the SUEZ concessionaire (determining criterion);
- the concession operator, SUEZ, is responsible for managing the related infrastructure and performing the actual public service and is not just a simple agent acting on orders;
- the concession operator, SUEZ, is entrusted with specific infrastructure expansion or upgrading obligations while maintaining the infrastructure in proper condition;
- the price and the conditions (regulation) for price revision are set at the origin of the contract.

For a concession contract to be included in the scope of IFRIC 12, the infrastructure must be controlled by the grantor. Control of the infrastructure by the grantor is ensured when the following two conditions are met:

- the grantor controls or regulates the public service, *i.e.* it controls or regulates the services to be provided through the infrastructure subject to the concession and determines to whom and at what price they should be provided; and
- the grantor controls all residual interest in the infrastructure at the end of the contract. This control is usually reflected through the grantor's right to take over the infrastructure at the end of the contract.

The IFRIC 12 interpretation applies under IFRS 15. Most of the time, concession contracts include two performance obligations – construction and operations:

- the construction performance obligation includes the creation of new infrastructure, the extension or improvement of existing infrastructure, financed by the concession operator SUEZ, which makes it possible to create future economic benefits. Revenues from construction performance are in all cases recognized using the percentage of completion method, since the infrastructure is built on the customer's site. The customer takes control of the infrastructure as it is completed. The accounting counterpart of revenue is a contract asset (see Note 1.5.15), while construction is in progress. On the date of entry into service, the contract asset is reclassified, depending on how the SUEZ Group is remunerated for the service. Thus:
  - the asset becomes a receivable, therefore a financial asset, when the operator has an unconditional right to receive a predetermined amount of cash, either directly from the grantor or indirectly through the guarantees given by the grantor on the amount of cash receipts from public service users (*e.g. via* a contractually guaranteed internal rate of return). The receivable contains a financing component within the meaning of IFRS 15 since the customer pays for a service the Group already performed over a period of several years. This accounting scheme applies in particular to BOT (Build, Operate and Transfer) contracts signed with local authorities and relating to public services such as wastewater treatment and household waste incineration,
  - when the concession operator does not receive an unconditional right to receive a predetermined amount of cash, the asset becomes an intangible asset: the concession operator is entitled to bill the users of the public service, the concession operator is paid in substance by the user. Most of the SUEZ Group's concession contracts fall under this model,
  - lastly, when the concession operator only obtains this unconditional right to receive cash only for part of its construction obligation performance, the revenue counterpart is a financial asset for that part, and an intangible asset for the residual amount;
- the operation performance obligation includes current operations of infrastructure, carrying out operations service for the customer (distribution of drinking water; waste treatment, etc.) and incurring identical renewal expenses to maintain the facilities in proper condition.

The amounts received from the customer on the concession contract are divided up between compensation for construction services on the one hand and compensation for operations services on the other, in accordance with the terms and conditions of IFRS 15 and IFRIC 12:

- when the asset created is a receivable, the amounts received from the customer as compensation for the construction performance obligation are partly recognized as interest income in revenues and partially as repayment of principal of the receivable. The amount received in compensation for the operations performance obligation is recorded as revenues;
- when the asset created is an intangible asset, it is amortized over the term of the concession contract. All amounts received from the customer are fully recognized in revenue.

Property, plant and equipment received at no cost from the grantor as infrastructure, to which the concession operator is granted access for the purposes of the service agreement, that may not be transferred as these will be returned to the grantor at no cost at the end of the contract, are not recorded in the statement of financial position.

The SUEZ Group may have to transfer cash to the grantor in certain cases. If these payments are not for the right to use an asset that is separate from the concession contract, according to IFRIC 12, then, these payments constitute:

- a reduction in the infrastructure's sales price, recognized as operating expenses when the consideration for the construction performance obligation is a financial asset;
- an increase in the intangible asset when the consideration for the construction performance obligation is an intangible asset and the payments to the grantor are fixed; the amount of this increase in intangible assets corresponds to the present value of future fixed payments;
- an operating expense when the consideration for the construction performance obligation is an intangible asset and the payments to the grantor are variable.

Renewal expenses correspond to obligations provided for in contracts whose terms and conditions may differ (contractual rehabilitation obligation, contractual renewal plan, contractual monitoring account, etc.).

They are recognized either as assets in the statements of financial position as intangible assets or financial assets in accordance with the model applicable to the contract if they generate future economic benefits (improving renewal), or as expenses in the opposite case (identical renewal).

Expenditure on identical renewals is recognized as an asset or a liability as concession renewal work when, at a given date, there is a time shift between the contractual commitment and its fulfilment.

The concession renewal work liability recorded in respect of the general obligation to restore the site amounted to EUR 166.9 million at the end of the financial year, compared with EUR 194.1 million at

December 31, 2018. This item is classified as "current contracts liabilities".

Amounts are calculated contract by contract based on the obligations of each contract.

1.5.14 Costs to obtain and execute contracts

IFRS 15 also establishes the principles for recognizing the costs of obtaining and executing contracts signed with customers.

SUEZ recognizes under assets on the statement of financial position all significant marginal costs to obtain contracts signed with customers where costs were incurred after the date on which the Group was almost certain to be granted contracts. These marginal costs are the costs that SUEZ incurs to obtain a contract with a customer and that the Group would not have incurred if it had not obtained the contract *(e.g.* commissions paid to sales professionals when new contracts are being entered into).

SUEZ also recognizes contract costs under assets on the statement of financial position when these costs:

- are directly related to a specific contract (direct labor costs, costs that can be rebilled to the customer as per the contract, raw material costs);
- provide the Group new or increased resources which will be used to meet or to continue to meet a performance obligation in the future;
- the Group expects to recover these costs.

Assets thus recognized on the costs of obtaining and executing contracts are then transferred to the income statement as and when the services are provided to the client.

1.5.15 Contracts assets and liabilities

As of December 31, 2019, as during previous fiscal years, the SUEZ Group presents separately, as assets in the statement of financial position, trade receivables corresponding to the unconditional right to receive cash, in exchange for the contractual obligations that SUEZ has already fulfilled.

There are also situations in which SUEZ has fulfilled some of its obligations under contracts signed with customers but has not yet obtained an unconditional right to receive cash because, for example, a technical milestone has not been achieved as of the reporting date. These situations require the Group to present the assets concerned on two separate lines on the statement of financial position: "Non-current Contracts Assets" and "Current Contracts Assets". Contracts assets are impaired as soon as impairments on these assets are expected, by applying the same principles as those described in section 1.5.9 for impairments on trade receivables.

In addition, there are contracts liabilities with customers which are incurred because customers have already paid for services that SUEZ has not yet performed (advances received on services not yet performed, deferred income). They are separated into two line items: "Non-current Contracts Liabilities" and "Current Contracts Liabilities".

1.5.16 Current operating income (COI)

Current operating income is an indicator used by the Group to present "a level of operational performance that can be used as part of an approach to forecast recurring performance" (in accordance with ANC Recommendation 2013–03 in the financial statements of companies applying IFRS). COI is a sub-total which helps management to better understand the Group's performance because it excludes elements which are inherently difficult to predict due to their unusual, irregular or non-recurring nature. For the Group, these elements relate to the Mark-to-Market (MtM) value on operating financial instruments, asset impairments, restructuring costs, scope effects, other gains and losses on disposals, and non-recurring items. They are defined as follows:

- MtM on operating financial instruments: This corresponds to changes in the fair value (Mark-to-Market) of financial instruments relating to currency hedging, commodities and gas which do not qualify as either trading or hedging instruments. These contracts are used in economic hedges of operating transactions;
- impairment on property, plant and equipment, intangible and financial assets: this includes impairment losses on goodwill, intangible and tangible assets, investments in associates and equity instruments;
- restructuring costs: These relate to costs of a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by an entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- scope effects. This line includes:
  - direct costs related to acquisitions of controlling interests,
  - in the event of a business combination achieved in stages, impacts of the remeasurement of the previously held interests at acquisition-date fair value,
  - subsequent changes in the fair value of contingent consideration,
  - gains or losses from disposals of interests which result in a change in consolidation method, as well as any impact of the remeasurement of retained interests,
  - other gains and losses on disposals and non-recurring items: this includes mainly capital gains and losses on disposals of non-current assets and equity instruments.

1.5.17 Statements of cash flows

The Group consolidated statement of cash flows is prepared based on net income, using the indirect method.

"Interest received on non-current financial assets" is classified within investing activities because it represents a return on investments. "Interest received on cash and cash equivalents" is shown as a component of financing activities because the interest can be used to reduce borrowing costs.

Impairment losses on current assets are identified as definitive losses, and therefore any change in current assets is shown net of impairment.

Cash flows related to payment of taxes are treated separately.

Pursuant to IAS 7 amendment "Disclosure initiative for statement of cash flows", financial debt variations by flows are analyzed by type of transactions: cash flows, forex effect, scope effect, change in fair value and amortized cost, other. This breakdown is presented in Note 13.2.1 for the 2019 financial year.

In accordance with the terms and conditions of IAS 7 – Statement of Cash Flows, the Cash and cash equivalents line in the statements of cash flows includes bank overdrafts when the bank counterparty may require repayment of the negative balance and when the balance of the accounts concerned changes drastically from a negative to positive position on a regular basis. In this case, the "Consolidated statements of cash flows" includes explanations on reconciling items with the cash and cash equivalents line item on the statements of financial position.

1.5.18 Income tax expense

The Group computes taxes in accordance with the prevailing tax legislation in the countries where income is taxable.

In accordance with IAS 12, deferred taxes are recognized according to the liability method on temporary differences between the book values of assets and liabilities in the Consolidated Financial Statements and their tax bases, using tax rates that have been enacted or substantively enacted by the reporting date. However, under the provisions of IAS 12, no deferred taxes are recognized for temporary differences arising from goodwill for which impairment losses are not deductible for tax purposes, or from the initial recognition of an asset or liability in a transaction which (i) is not a business combination; and (ii) at the time of the transaction, affects neither accounting income nor taxable income. In addition, deferred tax assets are only recognized to the extent that it is probable that taxable income will be available against which the deductible temporary difference can be utilized.

Temporary differences arising on restatements of finance leases result in the recognition of deferred taxes.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures, except if the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Net balances of deferred tax are calculated based on the tax position of each company or on the total income of the companies included within the consolidated tax Group and the net position of each fiscal entity is recorded on the statement of financial position under assets or liabilities, as appropriate.

Deferred taxes are reviewed at each reporting date to take into account factors including the impact of changes in tax laws and the prospects of recovering deferred tax assets arising from deductible temporary differences.

Deferred tax assets and liabilities are not discounted.

1.5.19 Earnings per share

Net income per share is calculated by dividing the adjusted net income Group share for the fiscal year attributable to ordinary shares by the weighted average number of shares outstanding during the fiscal year. The adjusted net income Group share takes into account the cost of the coupon attributable to holders of undated deeply subordinated notes issued by SUEZ. The average number of shares outstanding during the fiscal year is the number of ordinary shares outstanding at the beginning of the year, adjusted by the number of ordinary shares bought back or issued during the course of the year.

For the calculation of diluted earnings per share, the weighted average number of shares and earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (OCEANE convertible bonds mainly).

Note 2 Major transactions

2.1 Disposal of 20% of regulated water business activities in the United States

In accordance with the agreement signed on July 25, 2018 with PGGM, a Dutch pension fund management company, SUEZ finalized on March 1, 2019, the disposal of 20% of the share capital of SUEZ Water Resources Inc., the parent company of all regulated water activities in the United States. The transaction amounted to USD 601 million, fully paid in cash. At the end of this operation, SUEZ still controls the company.

2.2 Definitive dispute settlement between SUEZ and Argentina over Aguas Argentinas

The government of Argentina and SUEZ signed and executed, in April 2019, a transactional settlement agreement in accordance with the sentence handed down in its favor by the ICSID (International Centre for Settlement of Investment Disputes) for the concession of water and wastewater treatment in Buenos Aires, terminated in 2006.

Several entities both inside and outside SUEZ Group were involved in the procedure and benefited from this agreement. In April, 2019, solely for the SUEZ Group, the amount in cash received totaled EUR 224.1 million.

In addition, on December 14, 2018, the ICSID handed down a definitive favorable ruling to SUEZ as part of the termination of the Aguas Provinciales de Santa Fé water and wastewater concession contract (see Note 23).

2.3 Bond redemption

On April 8, 2019, SUEZ repaid the EUR 800 million nominal loan issued on April 8, 2009. It bore a coupon of 6.25%.

2.4 Issue of new Undated Deeply Subordinated Notes and buyback of notes issued in 2014

On September 12, 2019, SUEZ issued new Undated Deeply Subordinated Notes (hybrid bonds) for a total amount of EUR 500 million. The new notes will bear interest at a fixed rate of 1.625%, revised for the first time seven years after issue, then every five years. The funds raised have been allocated to buyback the shares issued in June 2014 for an amount of around EUR 352.1 million.

2.5 New bond issue and partial buyback of existing bonds

On October 14, 2019, SUEZ issued new 12-year senior bonds for a total amount of EUR 700 million. The new shares will bear interest at a fixed rate of a 0.500% per year.

The funds raised have been allocated to refinance the partial buyback of existing bonds:

- EUR 151.8 million of an initial amount of EUR 750 million with a 4.078% coupon, maturing in 2021;
- EUR 135.3 million of an initial amount of EUR 750 million with a 4.125% coupon, maturing in 2022;
- EUR 123.6 million of an initial amount of EUR 500 million with a 2.750% coupon, maturing in 2023;
- EUR 39.0 million of an initial amount of EUR 500 million with a 5.500% coupon, maturing in 2024;

for a total nominal amount of EUR 449.7 million.

Note 3 Operating segments information

In accordance with the provisions of IFRS 8 – "Operating Segments", the segments used below to present segment information have been identified based on internal reporting, in particular those segments monitored by the Management Committee, comprised of the Group's key operational decision-makers.

The Group uses five operating segments:

- Water Europe;
- Recycling and Recovery Europe;
- International;
- WTS (Water Technologies & Solutions);
- Other.

A distinction is made in Europe between the water distribution and water treatment services and the waste collection and waste treatment services.

The activities conducted internationally are grouped together and separated from those conducted in the Europe region. This specific segmentation reflects the difference in development strategy implemented internationally compared to the strategy pursued in Europe and is consistent with the Group's internal organizational systems and management structure.

Finally, all the water treatment services for industrial customers are isolated in the WTS sector.

3.1 Operating segments

SUEZ's subsidiaries are divided into the following operating segments:

- **Water Europe:** water distribution and treatment services, particularly under concession contracts (water management). These services are rendered to individuals, local authorities and industrial clients;
- **Recycling and Recovery Europe:** waste collection and treatment services for local authorities and industrial clients. These services include collection, sorting, recycling, composting, energy recovery and landfilling for both non-hazardous and hazardous waste;
- **International:** The Group is expanding in these business segments, depending on the opportunities that may arise, in the areas of water, waste and engineering services, with a special focus on risk-management resulting from specific local environments by setting up partnerships, entering into hedges, and limiting invested capital or other investments in highly regulated environments;
- **WTS:** This sector includes all water services for the industrial customer segment;
- the "**Other**" segment is made up of holding companies, including SUEZ, as well as SUEZ Consulting, a consulting subsidiary of the Group.

The accounting principles and valuation methods used to prepare internal reporting are the same as those used to prepare the Consolidated Financial Statements. The EBITDA, EBIT, capital employed and investments indicators are reconciled with the Consolidated Financial Statements.

3.2 Key indicators by operating segment

Revenues

(in millions of euros)	December 31, 2019			December 31, 2018		
	Non-Group	Group	Total	Non-Group	Group	Total
Water Europe	4,638.1	65.2	4,703.3	4,628.9	54.1	4,683.0
Recycling and Recovery Europe	6,471.5	74.2	6,545.7	6,206.1	59.1	6,265.2
International	4,195.4	3.0	4,198.4	3,990.2	1.9	3,992.1
WTS	2,595.4	63.1	2,658.5	2,396.3	60.5	2,456.8
Other	114.9	163.2	278.1	109.6	132.1	241.7
Intercompany eliminations		(368.7)	(368.7)		(307.7)	(307.7)
Total revenues	**18,015.3**	**–**	**18,015.3**	**17,331.1**	**–**	**17,331.1**

EBITDA

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	1,151.9	1,136.1
Recycling and Recovery Europe	880.5	683.8
International	979.2	816.3
WTS	278.2	249.6
Other	(69.4)	(117.5)
Total EBITDA [a]	**3,220.4**	**2,768.3**

(a) At December 31, 2019, this amount includes the impact of IFRS 16 for EUR 328.6 million.

EBIT

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	493.5	503.0
Recycling and Recovery Europe	308.2	287.1
International	616.5	562.6
WTS	134.4	127.7
Other	(144.9)	(145.1)
Total EBIT [a]	**1,407.7**	**1,335.3**

(a) At December 31, 2019, this amount includes the impact of IFRS 16 for EUR 13.2 million.

Depreciation and amortization

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	(477.9)	(443.2)
Recycling and Recovery Europe	(516.8)	(367.7)
International	(323.4)	(252.1)
WTS	(160.3)	(127.9)
Other	(54.2)	(19.4)
Total depreciation and amortization [a]	**(1,532.6)**	**(1,210.3)**

(a) At December 31, 2019, this amount includes the impact of IFRS 16.

Capital employed

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	5,460.2	5,545.5
Recycling and Recovery Europe	4,447.6	3,538.0
International	6,786.6	6,035.3
WTS	3,523.0	3,458.9
Other	148.5	67.1
Total Capital employed [a]	**20,365.9**	**18,644.8**

(a) At December 31, 2019, this amount includes the impact of IFRS 16 for EUR 1,405.8 million.

Investments in property, plant and equipment, intangible assets and financial assets

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	(431.0)	(441.8)
Recycling and Recovery Europe	(385.2)	(392.2)
International	(50.5)	(494.3)
WTS	(104.4)	(154.8)
Other	(33.1)	(17.0)
Total investments	**(1,004.2)**	**(1,500.1)**

Financial investments included in this indicator include the acquisitions and sales of additional interests in still remaining controlled entities, which are accounted for in cash flows used in financing activities in the consolidated statement of cash flows under the item "Change in share of interests in controlled entities". Reconciliation with the cash flow statement is made in Note 3.4.3.

3.3 Key indicators by geographical area

The indicators below are analyzed by:

- destination of products and services sold for revenues;
- geographical location of consolidated companies for capital employed.

	Revenues		Capital Employed	
(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
France	5,075.2	5,059.7	3,145.6	2,296.7
Europe	5,825.8	5,583.5	6,025.4	5,692.3
International	7,114.3	6,687.9	11,194.9	10,655.8
Total [a]	**18,015.3**	**17,331.1**	**20,365.9**	**18,644.8**

(a) At December 31, 2019, the amount of capital employed includes the impact of IFRS 16.

3.4 Reconciliation of indicators with consolidated financial statements

3.4.1 Reconciliation of EBIT and EBITDA with Current operating income

(in millions of euros)	December 31, 2019	December 31, 2018
Current operating income	**1,208.4**	**1,142.4**
(+) Share in net income of equity-accounted companies considered as core business	198.3	192.9
(–) Others	1.0	–
EBIT	**1,407.7**	**1,335.3**
(–) Net depreciation, amortization and provisions	1,531.7	1,167.7
(–) Share-based payments [a]	17.7	2.9
(–) Disbursements under concession contracts	263.3	262.4
EBITDA	**3,220.4**	**2,768.3**

(a) The impact of Share Appreciation Rights is disclosed after hedging by Warrants. In addition, this amount does not include long-term cash compensation plans.

3.4.2 Reconciliation of capital employed with items of the statement of financial position

(in millions of euros)	December 31, 2019	December 31, 2018
(+) Tangible and intangible assets, net	13,726.7	13,756.5
(+) Goodwill, net	5,322.1	5,223.8
(+) Rights of use	1,405.8	–
(+) Equity instrument (excluding marketable securities and impact of revaluation to fair value)	254.4	264.5
(+) Loans and receivables carried at amortized cost (excluding assets related to financing)	745.1	720.4
(+) Investments in joint ventures (excluding Other comprehensive income net of taxes)	953.9	897.3
(+) Investments in associates (excluding Other comprehensive income net of taxes)	1,142.4	1,143.8
(+) Trade and other receivables	4,670.9	4,584.0
(+) Inventories	528.0	499.5
(+) Contracts assets	780.0	722.8
(+) Other current and non-current assets	1,833.3	1,714.7
(–) Provisions and actuarial losses/gains on pensions plans	(1,478.2)	(1,597.4)
(–) Trade and other payables	(3,534.3)	(3,798.9)
(–) Contracts liabilities	(1,178.5)	(1,264.2)
(–) Other current and non-current liabilities	(4,762.9)	(4,174.8)
(–) Other financial liabilities	(42.8)	(47.2)
Capital employed	**20,365.9**	**18,644.8**

3.4.3 Reconciliation of investments in property, plant and equipment of intangible assets and financial investments with items in the statement of cash flows

(in millions of euros)	December 31, 2019	December 31, 2018
Investments in property, plant and equipment and intangible assets	(1,417.3)	(1,342.9)
Takeover of subsidiaries net of cash and cash equivalents acquired	(49.6)	(66.9)
Acquisitions of interests in associates and joint-ventures	(23.1)	(47.8)
Acquisitions of equity instruments	(15.9)	(31.7)
Change in share of interests in controlled entities	501.7	(10.8)
Total investments	**(1,004.2)**	**(1,500.1)**

Note 4 Current operating income

The components of current operating income are as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Revenues	18,015.3	17,331.1
Purchases	(3,720.7)	(3,648.6)
Personnel costs	(4,701.4)	(4,598.4)
Depreciation, amortization and provisions	(1,531.7)	(1,167.7)
Other operating income and expenses	(6,853.1)	(6,774.0)
Current operating income	**1,208.4**	**1,142.4**

4.1 Revenues

4.1.1 Revenues by nature

The following table shows Group's revenues per category:

(in millions of euros)	December 31, 2019	December 31, 2018
Sale, transport and distribution of electricity	438.3	426.8
Water, Recycling and Recovery	14,116.6	13,719.7
Construction contracts, equipment sales, engineering and other services [a]	2,481.5	2,217.2
Sale of chemical treatments for industrial water	978.9	967.4
Total	**18,015.3**	**17,331.1**

(a) Revenues include rental income of EUR 105.2 million.

4.1.2 Backlog

Backlog represents future revenue on contracts signed with customers for the following activities: construction contracts (excluding new works and concessions), equipment sales and engineering.

At December 31, 2019, the breakdown of the backlog book is as follows:

(in millions of euros)	Total	Less than a year	From 1 to 5 years	Beyond 5 years
December 31, 2018	2,064.4	1,536.7	493.1	34.6
December 31, 2019	2,399.9	1,481.1	883.2	35.6

4.1.3 Contracts Assets and Contracts liabilities

	December 31, 2019		December 31, 2018	
(in millions of euros)	Non-current	Current	Non-current	Current
Contracts assets	46.2	733.8	95.6	627.2
Contracts liabilities	267.3	911.3	287.7	976.5

Contracts assets and contracts liabilities include the amounts due to and due from customers under construction contracts:

(in millions of euros)	December 31, 2019	December 31, 2018
Amounts due from customers under construction contracts	437.1	377.5
Amounts due to customers under construction contracts	268.9	217.6
Net position	**168.2**	**159.9**

In addition, at the closing date, the costs and margins incurred on construction contracts in progress are as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Cumulated costs incurred and margins recognized	6,333.6	5,763.6
Advances received	108.1	121.6
Retentions	54.8	53.2

4.2 Personnel costs

(in millions of euros)	December 31, 2019	December 31, 2018
Short-term benefits	(4,673.6)	(4,507.2)
Share-based payments or by cash payment	(14.9)	(6.9)
Post-employment benefit obligations and other long-term benefits	(12.9)	(84.3)
Total	**(4,701.4)**	**(4,598.4)**

Short-term benefits correspond to salaries and expenses recognized for the period. Share-based payments and cash-based payments are broken down in Note 20. This amount includes the expenses related to long-term incentive plans.

Post-employment benefit obligations and other long-term benefits are disclosed in Note 19. This amount corresponds to defined-benefit plan expenses (see Note 19.2.3) and to defined-contribution plan expenses (see Note 19.3).

4.3 Depreciation, amortization and provisions

The amounts shown below are net of reversals.

(in millions of euros)	December 31, 2019	December 31, 2018
Amortization	(1,532.6)	(1,210.3)
Depreciation of inventories, trade receivables and other assets	7.2	(3.2)
Net change in provisions [a]	(6.3)	45.8
Total	**(1,531.7)**	**(1,167.7)**

(a) Excluding post employment benefit obligations presented in Note 4.2 above.

The amortization breakdown is: -EUR 742.3 million for property plant and equipment, -EUR 474.9 million for intangible assets and –EUR 315.4 million for rights of use. The breakdown by type of asset is shown in Notes 10,11 and 15.

4.4 Other operating income and expenses

Other operating income and expenses include the following amounts:

(in millions of euros)	December 31, 2019	December 31, 2018
Other operating income	**236.7**	**225.2**
Other operating expenses	**(7,089.8)**	**(6,999.2)**
Sub-contracting	(2,891.1)	(2,613.3)
Taxes excluding corporate income tax	(709.4)	(764.4)
Other expenses	(3,489.3)	(3,621.5)
Total	**(6,853.1)**	**(6,774.0)**

"Other expenses" mainly include the following types of costs: external personnel, professional fees and compensation of intermediaries.

Note 5 Income from operating activities

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Current operating income		**1,208.4**	**1,142.4**
Market to Market on operating financial instruments	5.1	3.7	(0.8)
Impairment on property, plant and equipment, intangible and financial assets	5.2	(64.8)	(25.6)
Restructuring costs	5.3	(132.3)	(87.6)
Scope effects	5.4	8.4	(6.2)
Other gains and losses on disposals and non-recurring items	5.5	26.6	60.1
Aguas Argentinas dispute settlement	5.6	214.9	–
Income from operating activities		**1,264.9**	**1,082.3**

5.1 MtM on operating financial instruments

The Mark-to-Market on operating financial instruments amounted to a gain of EUR 3.7 million at December 31, 2019, versus a loss of EUR 0.8 million in 2018 resulting primarily from the following factors:

- implementation of economic hedging strategies through forward contracts traded on wholesale markets by certain Group entities. The objective of this strategy is to optimize margins by reducing their sensitivity to changes in raw material prices;
- recognition of gains and losses in the income statement in respect of the ineffective portion of hedging strategies for future cash flows on non-financial assets (cash flow hedge).

5.2 Impairments of property, plant and equipment, intangible assets and financial assets

(in millions of euros)	December 31, 2019	December 31, 2018
Impairments		
Property, plant and equipment and other intangible assets	(32.5)	(3.3)
Rights of use	(0.5)	–
Financial assets	(39.1)	(25.1)
Total	**(72.1)**	**(28.4)**
Write-back of impairments		
Property, plant and equipment and other intangible assets	4.1	0.3
Financial assets	3.2	2.5
Total	**7.3**	**2.8**
Total	**(64.8)**	**(25.6)**

5.2.1 Impairment of goodwills

As of December 31, 2019, one-off tests carried out on goodwill in accordance with the procedure described in Note 9.3 did not reveal any impairment on goodwill.

5.2.2 Impairments of property, plant and equipment and intangible assets excluding goodwills

In 2019, impairment losses on property, plant and equipment and intangible assets mainly concern the Recycling and Recovery Europe operating segment, especially in France and Water Europe in France and in Spain.

In 2018, losses were also recorded in the Recycling and Recovery Europe operating segment, especially in France.

5.2.3 Impairment of financial assets

In 2019, as in 2018, this item includes impairment losses on financial receivables relating to concession contracts in the Recycling and Recovery Europe operating segment.

5.3 Restructuring costs

At December 31, 2019, this item includes in particular the additional impacts of the restructuring plans initiated in 2017 in Spain, for EUR 17.1 million; as well as the costs related to reorganizations initiated in several entities and Business Units of the Group in France and abroad, excluding WTS, for a total amount of approximately EUR 72 million and in WTS for EUR 39.1 million.

At December 31, 2018, this item included in particular the additional impacts of the restructuring plans initiated in 2017 in Spain and France.

5.4 Scope effects

At December 31, 2019, this item includes the sale of the British company Triogen and proceeds from adjusting the contingent consideration of an Indian WTS entity.

At December 31, 2018, this item mainly included the sale of a company having a peripheral activity in R&R France.

5.5 Other gains and losses on disposals and non-recurring items

(in millions of euros)	December 31, 2019	December 31, 2018
Disposals of property, plant and equipment and intangible assets	25.4	63.3
Disposals of shares	0.3	(3.9)
Others	0.9	0.7
Total	**26.6**	**60.1**

In 2019, this item records gains from disposals of property, plant and equipment in Chile and in Spain as well as losses from disposals and write-offs of fixed assets in France.

In 2018, this item mainly included gains related to the sale by Recycling and Recovery France of its Infectious Medical Waste (IMW) activities, its nuclear waste treatment activities and, finally, the proceeds from various disposals of property, plant and equipment in Chile and France.

5.6 Aguas Argentinas dispute settlement

A description of this settlement is provided in Note 2.2. After taking into account various expenses and fees, the impact is EUR 214.9 million.

Note 6 Net financial income/loss

	December 31, 2019			December 31, 2018		
(in millions of euros)	Expenses	Income	Total	Expenses	Income	Total
Cost of net debt	(441.5)	22.0	(419.5)	(458.6)	36.1	(422.5)
Other financial income and expenses	(162.3)	67.8	(94.5)	(97.0)	54.1	(42.9)
Financial income/(loss)	**(603.8)**	**89.8**	**(514.0)**	**(555.6)**	**90.2**	**(465.4)**

6.1 Cost of net debt

This item primarily includes interest expenses related to gross borrowings (calculated using the effective interest rate – EIR), gains and losses arising from foreign currency and interest rate hedging transactions on gross borrowings, as well as interest income on cash investments and changes in the fair value of financial assets measured at fair value through income.

	December 31, 2019			December 31, 2018		
(in millions of euros)	Expenses	Income	Total	Expenses	Income	Total
Interest expense on gross borrowings	(368.6)	–	(368.6)	(401.2)	–	(401.2)
Interest expense on lease liabilities	(28.9)	–	(28.9)	–	–	–
Exchange gain/(loss) on borrowings and hedges	(23.6)	–	(23.6)	(40.2)	–	(40.2)
Unrealized income/(expense) from economic hedges on borrowings	(0.2)	–	(0.2)	(0.1)	–	(0.1)
Income/(expense) on cash and cash equivalents, and financial assets at fair value through income	–	10.2	10.2	–	25.1	25.1
Capitalized borrowing costs	–	0.6	0.6	–	0.7	0.7
Financial income (expense) relating to a financial debt or receivable restructuring	(20.2)	11.2	(9.0)	(17.1)	10.3	(6.8)
Cost of net debt	**(441.5)**	**22.0**	**(419.5)**	**(458.6)**	**36.1**	**(422.5)**

The slight decrease in the cost of net debt between December 31, 2018 and December 31, 2019 is mainly due to the redemption of a bond with a 6.25% coupon for a nominal amount of EUR 800 million on April 8, 2019, which was replaced with cheaper financing instruments.

The impact of this redemption is partially offset by the first-time application of IFRS 16, which had generated an additional EUR 27.9 million in interest expense as of December 31, 2019.

6.2 Other financial income and expenses

(in millions of euros)	December 31, 2019 Expenses	Income	Total	December 31, 2018 Expenses	Income	Total
Net interest expenses related to post employment and other long-term benefits	(19.3)	–	(19.3)	(19.5)	–	(19.5)
Unwinding of discounting adjustment to long-term provisions (except post employment)	(51.7)	–	(51.7)	(44.3)	–	(44.3)
Change in fair value of derivatives not included in net debt	(0.3)	–	(0.3)	(0.8)	–	(0.8)
Income from equity instrument	–	3.3	3.3	–	8.7	8.7
Other	(91.0)	64.5	(26.5)	(32.4)	45.4	13.0
Other Financial Income and Expenses	**(162.3)**	**67.8**	**(94.5)**	**(97.0)**	**54.1**	**(42.9)**

The increase in the "Other" item from other financial income and expenses between December 31, 2018 and December 31, 2019 is mainly due to:

- advanced redemption fees for the SUEZ bond in October 2019 amounting to -EUR 53.4 million;
- compensation payments on the unwinding of derivatives following the bond redemption in October 2019 for an amount of +EUR 20.7 million.

Note 7 Income tax

7.1 Income tax expense in the income statement

7.1.1 Breakdown of income tax expense in the income statement

Income tax expense for the fiscal year amounted to EUR 340.0 million compared with EUR 244.0 million in 2018 and breaks down as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Current income tax	(246.1)	(222.7)
Deferred taxes	(93.9)	(21.3)
Total income tax expense recognized in income	**(340.0)**	**(244.0)**

7.1.2 Theoretical income tax expense and actual income tax expense

The reconciliation between the Group's theoretical income tax expense and actual income tax expense is shown in the following table:

(in millions of euros)	December 31, 2019	December 31, 2018
Net income	**609.2**	**565.8**
► Share in net income of associates and joint ventures	198.3	192.9
► Income tax expense	(340.0)	(244.0)
Income before income tax and share in net income of associates and joint ventures (A)	**750.9**	**616.9**
Of which French companies	*106.8*	*26.4*
Of which companies outside France	*644.1*	*590.5*
Statutory income tax rate of SUEZ (B)	34.4%	34.4%
Theoretical income tax expense (C) = (A) X (B)	**(258.5)**	**(212.4)**
In fact:		
Difference between the normal tax rate applicable to SUEZ and the normal tax rate applicable in jurisdictions in France and outside France [a]	56.4	33.6
Permanent differences [b]	(37.6)	(28.4)
Income taxed at a reduced rate or tax-exempt	3.2	4.0
Additional tax expense [c]	(64.9)	(36.1)
Effect of unrecognized deferred tax assets on tax loss carryforwards and on other tax-deductible temporary differences [d]	(126.8)	(41.9)
Recognition or utilization of tax assets on previously unrecognized tax loss carryforwards and other tax-deductible temporary differences [e]	32.4	10.6
Impact of changes in tax rates [f]	(10.5)	(10.9)
Tax savings and credits [g]	18.0	24.8
Other [h]	48.3	12.7
Actual income tax expense	**(340.0)**	**(244.0)**
Effective tax rate (actual income tax expense divided by income before income tax and share in net income of associates and joint ventures)	**45.3%**	**39.6%**

The overall corporate tax rate in France is 34.43%. Under current law, this rate will be 32.02% in 2020.

The main elements explaining the identified differences between the theoretical income tax expense and the effective tax rate are:
(a) In 2019 and in 2018, the mains rates differences with the French tax rates are: the federal tax rate in United-States (21%), the rate in Chile (27%) and the rate in Spain (25%).
(b) In 2019, SUEZ Sharing 2019 plan impacts come in addition to the limit on the deductibility of some financial expenses (as in 2018).
(c) In 2019 and 2018, the impact of tax due on dividends received under the French affiliation privilege regime and withholding taxes on dividends as well as "State Tax" on American subsidiaries.
(d) In 2019: -EUR 48.4 million corresponding to the impairment of net deferred tax assets within the French SUEZ tax consolidation Group and -EUR 24.4 million within the Spanish SUEZ tax consolidation Group including unrecognized deferred tax assets on tax loss carryforward on a tax credit.
In 2018: the impact of -EUR 16.5 million which corresponds to the impairment of deferred tax assets within the French WTS and SUEZ Spanish tax consolidation group. Furthermore, it included -EUR 7 million of impairment of deferred tax assets previously recognized in relation with the limit on the deductibility of financial Interests in the United States.
(e) In 2019: EUR 10.4 million of deferred tax asset recognition in the United States in relation with the limit on the deductibility of financial Interests in the United States, EUR 5.1 million on SUEZ R&R Nederland B.V. and EUR 3 million on SUEZ R&R Belgium N.V.
In 2018, this item included mainly the recognition of deferred tax on SUEZ R&R Belgium for EUR 3.9 million and R&R Netherlands for EUR 2.1 million.
(f) In 2019 and 2018: impact of the rate difference in France between statutory income tax rate and deferred tax rate by reversing horizon.
(g) In 2019: Impact of a tax credit amounted EUR 15.8 million in Spain.
In 2018: Impact of the tax credit for Competitiveness and Employment (CICE) and the tax credit for research (CIR) in France.
(h) In 2019 and 2018: the impact of the tax savings generated by the SUEZ tax consolidation Group in France and Spain as well as the impact of tax adjustments on prior years.

The analysis shows an increase of effective tax rate between 2018 and 2019. It is mainly explained by a higher volume of:

- unrecognized deferred tax asset particularly due to an -EUR 48.4 million impairment of net deferred tax assets within the SUEZ French tax consolidation group;
- additional tax expense especially the "State Tax" in the United States and tax due on dividends received under the French affiliation privilege regime between SUEZ and its affiliates.

Restated from net deferred tax write-off within the SUEZ French tax consolidation group which amounts to -EUR 48.4 million, effective tax rate would be 38.8%.

7.1.3 Analysis by type of temporary difference in deferred tax income/expenses on the income statement

(in millions of euros)	December 31, 2019	December 31, 2018
Deferred tax assets		
Loss carryforwards	(36.7)	(25.7)
Pension obligations	(25.3)	(0.3)
Concessions arrangements	3.6	1.4
Non-deductible provisions	3.3	8.5
Differences between the carrying amount of PPE and their tax bases	13.0	(3.8)
Measurement of financial instruments at fair value	(6.6)	11.2
Other	(7.1)	(37.0)
Total	**(55.8)**	**(45.7)**
Deferred tax liabilities		
Differences between the carrying amount of PPE and their tax bases	1.8	0.2
Concessions arrangements	(9.5)	1.1
Tax-driven provisions	0.2	(2.8)
Measurement of assets and liabilities at fair value	9.1	(0.5)
Other	(39.7)	26.4
Total	**(38.1)**	**24.4**
Net Deferred Taxes	**(93.9)**	**(21.3)**

In 2019, deferred tax charge on tax loss carryforward is mainly explained by the impairment of net deferred tax assets within the French SUEZ and WTS tax consolidation Group and within the Spanish tax consolidation group.

Deferred tax charge on pension obligations and related benefits is mainly explained by the change in medical coverage of French retiree causing a decrease of obligation and by the closing in 2019 of defined-benefit Pension Plan Article 39 so called "1991" and "1998".

Deferred tax charge of -EUR 39.7 million presented as "Others" in liabilities is mostly linked to the recurring tax effect of Undated Subordinated Notes interests reclassed in SUEZ S.A. equity when coupons are paid.

In 2018, the deferred tax assets recognized in relation with loss carryforwards mainly evolves under the effect of consumption of loss carryforwards within Australian consolidation tax group. Furthermore, the net change of deferred tax presented in the line "Other" corresponds particularly to the impairment of deferred tax assets previously recognized in the United States in relation with the limit on the deductibility of Interests and to the impairment of net deferred tax on other deductible temporary differences previously recognized in Spain.

7.2 Deferred tax income and expense recognized in "other comprehensive income"

Deferred tax income and expense recognized in "other comprehensive income" break down as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Equity instrument	(0.1)	0.2
Actuarial gains and losses	(16.0)	(33.8)
Net investment hedges	(5.0)	(0.1)
Cash flow hedges	3.7	(0.9)
Total excluding share of associates and joint ventures	**(17.4)**	**(34.6)**
Share of associates	(1.0)	(2.8)
Total	**(18.4)**	**(37.3)**

In 2019, tax effect recognized as variation in "other comprehensive income" is mainly explained by the net deferred tax asset impairment within SUEZ French tax consolidation on actuarial gains and losses for -EUR 19.5 million and on cash flow hedges for -EUR 4.8 million.

In 2018, tax effect is mainly due to actuarial gains and losses on pension and other employee benefit obligations in SUEZ Water Inc. -EUR 31.1 million.

7.3 Deferred taxes in the statement of financial position

7.3.1 Change in deferred taxes

Movements in deferred taxes recorded in the statement of financial position, after netting off the deferred tax assets and liabilities by tax entity, are broken down as follows:

(in millions of euros)	Assets	Liabilities	Net Balances
At December 31, 2018	**546.6**	**(649.4)**	**(102.8)**
IFRIC 23 Restatement	–	1.4	1.4
At January 1, 2019	**546.6**	**(648.0)**	**(101.4)**
From income statement	(55.8)	(38.1)	(93.9)
From other comprehensive income [a]	(65.1)	14.4	(50.7)
Scope effects	0.4	(3.2)	(2.8)
Translation adjustments	0.4	2.7	3.1
Other impacts	(7.5)	4.1	(3.4)
Deferred tax netting off by tax entity	122.9	(122.9)	–
At December 31, 2019	**541.9**	**(791.1)**	**(249.2)**

(a) Excluding share of associates and joint-ventures.

7.3.2 Analysis of the net deferred tax position recognized on the statement of financial position by type of temporary difference (before netting of deferred tax assets and liabilities by tax entity)

(in millions of euros)	December 31, 2019	December 31, 2018
Deferred tax assets		
Loss carry-forwards and tax credit	339.6	266.0
Pension obligations	90.7	184.5
Concessions arrangements	37.0	96.6
Non-deductible provisions	93.5	178.9
Differences between the carrying amount of PPE and their tax bases	208.1	125.2
Measurement of financial instruments at fair value	16.0	23.6
Other	284.0	321.8
Total	**1,068.9**	**1,196.6**
Deferred tax liabilities		
Differences between the carrying amount of PPE and their tax bases	(862.0)	(837.4)
Concessions arrangements	(85.3)	(76.7)
Tax-driven provisions	(19.7)	(20.0)
Measurement of assets and liabilities at fair value	(31.5)	(39.5)
Other	(319.6)	(325.8)
Total	**(1,318.1)**	**(1,299.4)**
Net Deferred Taxes	**(249.2)**	**(102.8)**

The deferred tax assets recognized on tax loss carry-forwards amount to EUR 339.6 million as of December 31, 2019 *versus* EUR 266 million as of December 31, 2018. These tax losses carried forward mainly correspond to the losses recognized by the SUEZ French consolidation tax Group, on WTS mainly in the United States and on Group water activities in the United States.

In 2019, within the SUEZ French consolidation tax Group:

- deferred tax assets for the year have been written off;
- opening stocks of the deferred tax assets have been impaired by profit and loss for -EUR 48.4 million and by equity through consolidated reserves and other comprehensive income for -EUR 56.7 million (See Notes 7.2 et 7.3.1).

Consequently, the total amount of net deferred tax assets within the SUEZ French tax consolidation group, including all temporary differences, amounted to EUR 37 million at December 31, 2019 *versus* EUR 201.4 million at December 31, 2018.

Management considers that the SUEZ French tax consolidation group will be able to use up its entirely net deferred tax assets not depreciated on all temporary differences over the 5-year medium-term plan or beyond.

7.4 Unrecognized deferred taxes

7.4.1 Deductible temporary differences unrecognized

Temporary differences on losses carried forward

At December 31, 2019, unused and unrecognized tax losses carried forward (unrecognized because they did not meet the criteria for recognition as a deferred tax asset) amount to EUR 325.9 million for ordinary tax loss carry-forwards, *versus* EUR 431.6 million as of December 31, 2018.

Other temporary differences unrecognized

The amount of deferred tax assets on unrecognized other temporary differences amounted to EUR 375.4 million at December 31, 2019, compared with EUR 212.5 million at December 31, 2018.

7.4.2 Unrecognized deferred tax liabilities on taxable temporary differences relating to investments in subsidiaries

No significant deferred tax liability has been recognized on temporary differences when the Group is able to control the timing of their reversal and it is probable that the temporary difference will not reverse in the foreseeable future.

Note 8 Earning per share

	December 31, 2019	December 31, 2018
Numerator *(in millions of euros)*		
Net income, Group share	**351.7**	**334.9**
► coupon attributable to holders of undated deeply subordinated Notes issued by SUEZ in June 2014	(11.8)	(15.0)
► coupon attributable to holders of undated deeply subordinated Notes issued by SUEZ in March 2015	(12.5)	(12.5)
► coupon attributable to holders of undated deeply subordinated Notes issued by SUEZ in April 2017	(17.3)	(17.3)
(+) Expenses related to the partial redemption of the undated deeply subordinated Notes issued in 2014	(10.3)	–
Adjusted Net Income, Group Share	**299.8**	**290.1**
Denominator *(in millions)*		
Weighted average number of outstanding shares	618.0	618.0
Earnings per share *(in euros)*		
Net income Group share per share	**0.49**	**0.47**
Net diluted income Group share per share	**0.48**	**0.47**

The Group's dilutive instruments included in the calculation of diluted earnings per share are as follows:

- the SUEZ bonus share plans;
- the SUEZ employee share issue;
- the OCEANE 2020 convertible bonds, *i.e.* 19,052,803 securities issued in 2014, which generate financial expense of EUR 6.8 million in 2019.

Note 9 Goodwill

9.1 Movements in the carrying amount of goodwill

(in millions of euros)	Gross amount	Impairment Losses	Carrying amount
At December 31, 2017	**5,234.4**	**(92.3)**	**5,142.1**
Scope effects	(24.4)	–	(24.4)
Impairment losses	–	–	–
Translation adjustments	98.7	1.9	100.6
Other	5.5	–	5.5
At December 31, 2018	**5,314.2**	**(90.4)**	**5,223.8**
Scope effects	31.9	–	31.9
Impairment losses	–	–	–
Translation adjustments	67.1	(1.1)	66.0
Other	0.4	–	0.4
At December 31, 2019	**5,413.6**	**(91.5)**	**5,322.1**

In 2019, the net change in goodwill amounts to +EUR 98.3 million. This is mainly the result of:

- the acquisition of ALS Group for +EUR 39.5 million;
- the sale of a French company Sita Espérance for -EUR 12.4 million;
- translation adjustments mainly relate to fluctuations on the US dollar for +EUR 46.5 million and the pound sterling for +EUR 18.0 million.

At December 31, 2018, the net change in goodwill amounted to +EUR 81.7 million and recorded the following items:

- the change in consolidation method of a Chinese joint venture which is now fully consolidated for -EUR 20.6 million;
- translation adjustments mainly relate to fluctuations on the US dollar for +EUR 109.8 million, the Australian dollar for –EUR 10.4 million and the Hong Kong dollar for +EUR 10.9 million.

9.2 Main goodwill cash generating units (CGUs)

Goodwill CGUs break down as follows:

(in millions of euros)	Operating segment	December 31, 2019	December 31, 2018
Material CGUs			
SUEZ WTS	WTS	1,852.2	1,817.7
R&R France	Recycling and Recovery Europe	608.4	620.7
SUEZ Spain	Water Europe	563.5	565.4
R&R News	Recycling and Recovery Europe	510.1	510.1
SUEZ Water Inc.– regulated activity	International	465.9	456.7
R&R UK	Recycling and Recovery Europe	365.5	347.7
Water France	Water Europe	328.3	328.3
SUEZ NWS	International	283.5	239.3
R&R Australia	International	160.2	157.9
Other CGUs (individual goodwill of less than EUR 150 million)		184.5	180.0
Total		**5,322.1**	**5,223.8**

9.3 Impairment test

All goodwill cash-generating units (CGUs) are tested for impairment based on actual data at the end of June, on the last forecast of the year taking into account the upcoming events in the second half of the year, on the following year budget and on the medium-term plan (MTP) over four years for the rest of the business plan.

For WTS, the data used correspond to year ended December 2019.

The recoverable value of goodwill CGUs is calculated by applying various methods, primarily the discounted cash flow (DCF) method, which is based on the following:

- cash flow projections prepared over the duration of the medium-term plan approved by the Group's Board of Directors. These are linked to operating conditions estimated by the Executive Committee, specifically the duration of contracts carried by entities of the CGU in question, changes in pricing regulations and future market outlooks;
- a terminal value for the period after the MTP, calculated by applying the long-term growth rate, which is between 1.9% and 2.7% depending on the activity, to normalized free cash flow[1] (used specifically in impairment tests) in the final year of the projections;
- a discount rate appropriate for the CGU depending on the business, country and currency risks of each CGU. The after-tax discount rates applied in 2019 range from 4.2% to 7.5%.

When this method is used, the measurement of the recoverable value of goodwill CGU is based on three scenarios ("low", "medium" and "high"), distinguished by a change in key assumptions: the discount rate and the long-term growth rate of normalized free cash flow. The "medium" scenario is preferred.

Valuations thus obtained are systematically compared with valuations obtained using the market multiples method or the stock exchange capitalization method, when applicable.

Based on events reasonably foreseeable at this time, the Group believes there is no reason to find material impairment on the goodwill shown in the statement of financial position, and that any changes affecting the key assumptions described below should not result in excess book value over recoverable amounts.

Main assumptions used for material goodwill

The following table describes the method and discount rate used in examining the recoverable amount of material goodwill CGUs:

Cash-generating units	Measurement method	Discount rates
SUEZ WTS	DCF	7.5%
R&R France	DCF	4.7%
SUEZ Spain	DCF	5.4%
R&R News	DCF	5.0%
SUEZ Water Inc.– regulated activity	multiples [a]	4.4%
R&R UK	DCF	5.1%
Water France	DCF	4.2%
SUEZ NWS	DCF	6.6%
R&R Australia	DCF	6.3%

(a) Valuation multiples of comparable entities: market value or transactions.

(1) The "normalized" free cash flow used in impairment tests is different from free cash flow in the following aspects: no financial interest, use of a normalized tax rate, taking into account all investment flows (maintenance capital expenditures and financial disposals, already committed development capital expenditures and financial acquisitions).

9.4 Sensitivity to interest rate and operational assumptions

A change of 50 basis points upward or downward in the discount rate or growth rate of normalized free cash flow does not affect the recoverable amounts of goodwill CGUs, which remain higher than their book values.

The table below shows the sensitivity of the measurements of recoverable value exceeding book value, in response to changes in discount rates and growth rates:

	Discount rates		Growth rate of "normalized" Free Cash Flow	
Impact in % on excess of recoverable value over book value	-50 pb	+50 pb	-50 pb	+50 pb
SUEZ WTS	370%	-303%	-213%	260%
R&R France	37%	-26%	-19%	27%
SUEZ Spain	101%	-68%	-61%	91%
R&R News	42%	-29%	-25%	36%
R&R UK	28%	-20%	-18%	25%
Water France	37%	-24%	-23%	35%
SUEZ NWS	31%	-24%	-21%	27%
R&R Australia	19%	-15%	-13%	16%

Moreover, the Group ensured that, in 2019, a reasonable decrease (equal to or less than 5%) of both cash flows during the medium-term plan and of the terminal value does not call into question the goodwill values of the different significant CGUs.

9.5 Segment information

The carrying amount of goodwills can be analyzed by operating segment as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Water Europe	735.9	741.8
Recycling and Recovery Europe	1,541.2	1,531.3
International	1,190.1	1,130.3
WTS	1,852.2	1,817.7
Other	2.7	2.7
Total	**5,322.1**	**5,223.8**

The segment breakdown above is based on the operating segment of the acquired entity (and not on that of the acquirer).

Note 10 Intangible assets

10.1 Movements in the carrying amount of intangible assets

(in millions of euros)	Softwares	Intangible rights arising on concession contracts	Other	Total
A) Gross amount				
At December 31, 2017	**795.7**	**5,834.8**	**2,124.5**	**8,755.0**
Acquisitions	39.5	234.0	76.0	349.5
Disposals	(17.3)	(133.8) [a]	(8.5)	(159.6)
Translation adjustments	(3.5)	15.5	35.2	47.2
Changes in scope of consolidation	(2.8)	(9.3)	(8.8)	(20.9)
Other	40.8	198.9 [b]	(57.2)	182.5
At December 31, 2018	**852.4**	**6,140.1**	**2,161.2**	**9,153.7**
Acquisitions	50.2	193.7	53.4	297.3
Disposals	(31.1)	(163.9) [a]	(4.7)	(199.7)
Translation adjustments	(3.8)	29.7	21.2	47.1
Changes in scope of consolidation	1.9	6.7	9.2	17.8
Other	36.8	21.3	(47.3)	10.8
At December 31, 2019	**906.4**	**6,227.6**	**2,193.0**	**9,327.0**
B) Accumulated depreciation and impairment				
At December 31, 2017	**(544.5)**	**(2,659.3)**	**(634.9)**	**(3,838.7)**
Depreciation	(71.0)	(317.9)	(90.0)	(478.9)
Impairment losses	(0.6)	–	1.9	1.3
Disposals	15.8	128.1 [a]	7.7	151.6
Translation adjustments	2.8	(8.4)	(0.6)	(6.2)
Changes in scope of consolidation	2.5	7.8	2.7	13.0
Other	(6.9)	(11.7)	4.9	(13.7)
At December 31, 2018	**(601.9)**	**(2,861.4)**	**(708.3)**	**(4,171.6)**
Depreciation	(72.8)	(313.4)	(88.7)	(474.9)
Impairment losses	(1.9)	(2.8)	(3.9)	(8.6)
Disposals	24.1	163.2 [a]	4.1	191.4
Translation adjustments	3.7	(11.8)	(5.0)	(13.1)
Changes in scope of consolidation	(1.8)	(5.2)	(0.7)	(7.7)
Other	3.1	(11.3)	1.4	(6.8)
At December 31, 2019	**(647.5)**	**(3,042.7)**	**(801.1)**	**(4,491.3)**
C) Carrying Amount				
At December 31, 2017	**251.2**	**3,175.5**	**1,489.6**	**4,916.3**
At December 31, 2018	**250.5**	**3,278.7**	**1,452.9**	**4,982.1**
At December 31, 2019	**258.9**	**3,184.9**	**1,391.9**	**4,835.7**

(a) At the end of the concession agreements, intangible assets falling within the scope of IFRIC 12 are balanced, at gross value and amortisation, by a disposal flow.
(b) Changes in "Other" mainly corresponded to the change in consolidation method of a Chinese joint venture that was fully consolidated in 2018.

10.2 Information on intangible assets

Intangible rights arising on concession contracts

The Group manages a large number of concession contracts as defined by SIC 29 (see Notes 1.5.4.2, 1.5.6 and 1.5.13.4) in the drinking water distribution, wastewater treatment and waste management businesses. Infrastructure rights granted to the Group as concession operator, falling within the scope of application of IFRIC 12, and corresponding to the intangible model, are recognized under this category. These include the rights to charge end users under IFRIC 12 the intangible asset model.

Most of the acquisitions of the year are done in Water Europe and International (Asia) sectors.

Non-depreciable intangible assets

At December 31, 2019, non-depreciable intangible assets, mainly composed of water rights, amount to EUR 95.6 million *versus* EUR 102 million at December 31, 2018, and are included in the column "Other".

No significant impairment was posted in this asset category in 2019.

Information on Research and development expenses

Research and development activities relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection and service quality.

Research and development activities that do not meet the assessment criteria defined in IAS 38 were posted to expenses in the amount of EUR 118.5 million at December 31, 2019 compared with EUR 120 million at December 31, 2018.

Expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset are not material for year end 2019.

Note 11 Property, plant and equipment

11.1 Movements in the carrying amount of property, plant and equipment

(in millions of euros)	Lands	Constructions	Plant and equipment	Transport equipment	Capitalized dismanting and restoration costs	Construction in progress	Other	Total property, plant and equipment
A) Gross amount								
At December 31, 2017	**2,020.7**	**3,302.3**	**8,290.7**	**1,346.8**	**539.3**	**850.8**	**505.2**	**16,855.8**
Acquisitions	7.2	115.5	245.9	23.8	–	638.6	30.6	1,061.6
Disposals	(12.5)	(55.0)	(193.9)	(121.3)	(0.6)	–	(23.2)	(406.5)
Translation adjustments	(26.7)	(45.3)	1.4	(8.9)	(5.1)	(14.4)	5.8	(93.2)
Changes in scope of consolidation	(7.6)	(15.5)	(10.1)	(2.3)	–	(6.9)	(4.3)	(46.7)
Other	30.0	24.6	534.1	21.1	0.3	(495.6)	19.5	134.0
At December 31, 2018	**2,011.1**	**3,326.6**	**8,868.1**	**1,259.2**	**533.9**	**972.5**	**533.6**	**17,505.0**
Acquisitions	10.7	74.1	240.3	28.8	–	692.2	38.9	1,085.0
Disposals	(27.1)	(31.2)	(152.0)	(126.2)	–	–	(50.8)	(387.3)
Translation adjustments	11.0	(58.1)	(83.1)	5.3	4.5	(24.8)	4.2	(141.0)
Changes in scope of consolidation	(8.4)	(4.7)	9.3	6.0	(3.0)	(1.5)	2.4	0.1
Other	149.1	(20.0)	421.5	17.8	(8.9)	(617.4)	16.2	(41.7)
At December 31, 2019	**2,146.4**	**3,286.7**	**9,304.1**	**1,190.9**	**526.5**	**1,021.0**	**544.5**	**18,020.1**
B) Accumulated depreciation and impairment								
At December 31, 2017	**(1,061.6)**	**(1,537.7)**	**(3,769.8)**	**(1,070.5)**	**(537.1)**	**(14.9)**	**(358.1)**	**(8,349.7)**
Depreciation	(71.2)	(136.7)	(391.8)	(76.4)	(0.3)	–	(55.0)	(731.4)
Impairment losses	(0.9)	(3.2)	3.1	(0.7)	–	(0.4)	(0.1)	(2.2)
Disposals	2.4	42.1	168.5	101.0	0.6	0.3	19.1	334.0
Translation adjustments	10.7	13.3	20.3	6.4	5.1	(0.4)	(3.0)	52.4
Changes in scope of consolidation	1.3	10.3	16.0	1.7	–	–	3.4	32.7
Other	(0.3)	8.5	(94.1)	3.0	(0.3)	0.3	16.5	(66.4)
At December 31, 2018	**(1,119.6)**	**(1,603.4)**	**(4,047.8)**	**(1,035.5)**	**(532.0)**	**(15.1)**	**(377.2)**	**(8,730.6)**
Depreciation	(83.6)	(149.7)	(373.7)	(63.1)	(0.4)	–	(71.8)	(742.3)
Impairment losses	(0.2)	(10.3)	(12.6)	(0.3)	–	(0.4)	(0.1)	(23.9)
Disposals	11.7	28.9	135.2	122.2	–	1.0	41.3	340.3
Translation adjustments	(21.2)	15.8	29.9	(3.6)	(4.5)	(0.3)	(2.9)	13.2
Changes in scope of consolidation	6.1	3.6	(5.9)	(5.0)	3.0	–	(3.6)	(1.8)
Other	(12.6)	25.3	(41.0)	4.0	8.9	11.8	19.6	16.0
At December 31, 2019	**(1,219.4)**	**(1,689.8)**	**(4,315.9)**	**(981.3)**	**(525.0)**	**(3.0)**	**(394.7)**	**(9,129.1)**
C) Carrying Amount								
At December 31, 2017	**959.1**	**1,764.6**	**4,520.9**	**276.3**	**2.2**	**835.9**	**147.1**	**8,506.1**
At December 31, 2018	**891.5**	**1,723.2**	**4,820.3**	**223.7**	**1.9**	**957.4**	**156.4**	**8,774.4**
At December 31, 2019	**927.0**	**1,596.9**	**4,988.2**	**209.6**	**1.5**	**1,018.0**	**149.8**	**8,891.0**

In 2019, the main changes concern acquisition of tangible assets in progress for (+EUR 692 million), mainly made in the United States (+EUR 301 million), France (+EUR 170 million) and Chile (+EUR 133 million).

In 2018, these acquisitions (+EUR 639 million) were mainly in the United States (+EUR 193 million), France (+EUR 191 million) and Chile (+EUR 116 million).

The main translation adjustments on the carrying amount of property, plant and equipment have been noted:

- in 2019, the Chilean peso (-EUR 209 million), the US dollar (+EUR 54 million) and the Pound sterling (+EUR 17 million);
- in 2018, the Chilean peso (-EUR 139 million), the US dollar (+EUR 126 million) and the Australian dollar (-EUR 13 million).

11.2 Pledged and mortgaged assets

Assets pledged and mortgaged as collateral for borrowings amounted to EUR 9.7 million at December 31, 2019 against EUR 10.6 million at December 31, 2018.

11.3 Contractual commitments for the acquisition of property, plant and equipment

In the course of ordinary operations, some Group companies have committed to investing in technical facilities which the third parties concerned undertake to deliver to them in return.

The Group's contractual commitments for property, plant and equipment amounted to EUR 633 million at December 31, 2019, against EUR 446.6 million at December 31, 2018.

Note 12 Investments in joint ventures and associates

12.1 Investments in joint ventures

The most significant equity interests are the Chinese joint ventures jointly owned by SUEZ NWS Limited, a Hong Kong-based company at 50% and by local concessionary authorities at 50%. Following the full consolidation of SUEZ NWS Limited in SUEZ, the shares from all the joint ventures (including all the Chinese joint ventures mentioned above) are accounted for by using the equity method according to SUEZ NWS Limited's percentage ownership (50% for the Chinese joint ventures) and represent EUR 593.5 million at December 31, 2019.

Another major joint venture is the Suyu Group, which is based in China and is 50%-owned by SUEZ.

	Carrying amount of investments in joint ventures		Share in net income/ (loss) of joint ventures	
(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
SUEZ NWS Limited Group	593.5	561.1	47.9	56.8
Suyu Group	316.4	298.0	15.9	17.9
Other	44.0	38.3	7.6	7.3
Total	**953.9**	**897.4**	**71.4**	**82.0**

(in millions of euros)	December 31, 2019	December 31, 2018
Net income	71.4	82.0
Other comprehensive income (OCI)	9.0	0.8
Comprehensive income	**80.4**	**82.8**

Below are the summarized statements of financial position (at 100%) of the Chinese joint ventures accounted for by using the equity method at SUEZ NWS Limited and the Suyu Group.

Summarized Statement of financial position

	December 31, 2019		December 31, 2018	
(in millions of euros)	Chinese joint ventures	Suyu Group	Chinese joint ventures	Suyu Group
Non-current assets	684.9	776.3	607.3	756.5
Current assets	234.7	20.8	291.4	2.2
of which Cash and cash equivalents	*119.4*	*20.8*	*139.5*	*2.2*
Total assets	**919.6**	**797.1**	**898.7**	**758.7**
Shareholders' equity, Group share	498.8	632.9	478.9	595.9
Non-controlling interests	3.7	–	4.5	–
Total shareholders' equity	**502.5**	**632.9**	**483.4**	**595.9**
Non-current liabilities	153.2	164.2	189.6	162.8
Current liabilities	263.9	–	225.7	–
Total shareholders' equity and liabilities	**919.6**	**797.1**	**898.7**	**758.7**
100% dividends paid in the previous financial year	**66.9**	**–**	**94.6**	**4.6**

Suyu's "Non-current assets" item includes Derun Environment shares equity accounted for EUR 740.7 million at the end of 2019, compared with EUR 721.3 million at the end of 2018.

Summarized Income Statement

(in millions of euros)	December 31, 2019		December 31, 2018	
	Chinese joint ventures	Suyu Group	Chinese joint ventures	Suyu Group
Revenues	373.9	–	360.8	–
Current operating income	64.4	–	68.7	–
Net income – Group share	47.4	–	62.4	–
Net income – non-controlling interests	0.7	–	0.6	–
Net income	**48.1**	**50.7** [a]	**63.0**	**59.4**
Other comprehensive income (OCI) [b]	4.9	6.1	(2.4)	(5.2)
Comprehensive income	**53.0**	**56.8**	**60.6**	**54.2**

(a) Derun Environnement's share in net income accounted for using the equity method in the Suyu Group.
(b) This amount corresponds to translation adjustments.

12.2 Investments in associates

Investments and income from associates break down as follows:

	Carrying amount of investments in associates		Share in net income/ (loss) of associates	
(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Acea Group	591.2	563.5	63.0	55.5
Agbar Group	167.9	190.4	14.7	15.5
Other (individual contributions less than 10% of the total)	311.1	330.4	49.2	39.9
Total	**1,070.2**	**1,084.3**	**126.9**	**110.9**

(en millions d'euros)	December 31, 2019	December 31, 2018
Net income	126.9	110.9
Other comprehensive income (OCI)	(7.7)	12.0
Comprehensive income	**119.2**	**122.9**

The main component of the item "Investments in associates" is the Acea Group, listed on the Milan Stock Exchange and in which the SUEZ Group holds 23.33% of the capital.

At December 31, 2019 the book value of Acea in the statement of financial position is EUR 591.2 million. Its market value is EUR 916.3 million.

The summarized financial information at 100% of the Acea Group are presented below.

The Consolidated Financial Statements of Acea Group at December 31, 2019 are not available at the date of publication of the Group's 2019 Consolidated Financial Statements.

In compliance with IAS 28 "Investments in Associates and joint ventures", the summarized statement of financial position at September 30, 2019 corresponds to the latest available information.

Summarized Statement of Acea Group financial position

(in millions of euros)	September 30, 2019	December 31, 2018
Non-current assets	6,150.8	5,735.5
Current assets	2,533.8	2,421.5
of which Cash and cash equivalents	*999.4*	*1,068.1*
Total assets	**8,684.6**	**8,157.0**
Shareholders' equity, Group share	1,782.1	1,729.6
Non-controlling interests	193.7	173.9
Total shareholders' equity	**1,975.8**	**1,903.5**
Non-current liabilities	4,145.2	3,962.9
Current liabilities	2,563.6	2,290.6
Total shareholders' equity and liabilities	**8,684.6**	**8,157.0**
100% dividends paid in the previous financial year	**151.2**	**133.9**

Summarized Income Statement of Acea Group – of the first nine months

(in millions of euros)	September 30, 2019	September 30, 2018
Revenues	2,346.2	2,173.9
Gross operating profit	740.8	659.6
Operating profit /(loss)	402.5	381.0
Net income – Group share	218.9	214.8
Net income – non-controlling interests	19.4	11.0
Net income	**238.3**	**225.8**
Other comprehensive income (OCI)	(6.6)	13.4
Comprehensive income	**231.7**	**239.2**

Note 13 Financial instruments

13.1 Financial assets

The following table shows the various financial asset categories and their breakdown as "non-current" and "current":

	December 31, 2019			December 31, 2018		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Equity instrument at fair value	132.2	–	132.2	133.0	–	133.0
Loans and receivables carried at amortized cost	653.7	4,762.3	5,416.0	610.7	4,693.7	5,304.4
Loans and receivables carried at amortized cost (excluding trade and other receivables)	653.7	91.4	745.1	610.7	109.7	720.4
Trade and other receivables	–	4,670.9	4,670.9	–	4,584.0	4,584.0
Financial assets measured at fair value	115.7	105.3	221.0	119.0	126.8	245.8
Derivative financial instruments	115.7	75.5	191.2	119.0	97.6	216.6
Financial assets measured at fair value through income	–	29.8	29.8	–	29.2	29.2
Cash and cash equivalents	–	3,703.0	3,703.0	–	3,424.1	3,424.1
Liquid financial investments	–	130.0	130.0	–	–	–
Other cash and cash equivalents	–	3,573.0	3,573.0	–	3,424.1	3,424.1
Total	**901.6**	**8,570.6**	**9,472.2**	**862.7**	**8,244.6**	**9,107.3**

13.1.1 Equity instruments at fair value

Movements during the period are broken down as follows:

(in millions of euros)	Equity instruments at JV through OCI	Equity instruments at JV through income
December 31, 2018	**105.0**	**28.0**
Acquisitions	15.9	–
Net book value of disposals	(8.0)	(3.5)
Changes in fair value posted to equity as other comprehensive income	3.0	–
Changes in fair value posted to income statement	–	2.7
Changes in scope, exchange rates and other	(10.7)	(0.2)
December 31, 2019	**105.2**	**27.0**

The value of equity instruments at fair value through OCI held by the Group amounts to EUR 105.2 million of unlisted securities as at December 31, 2019.

The value of equity instruments at fair value through income held by the Group amounts to EUR 27 million as at December 31, 2019, which is divided between EUR 22.2 million of listed securities and EUR 4.8 million of unlisted securities.

13.1.2 Loans and receivables carried at amortized cost

	December 31, 2019			December 31, 2018		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Loans and receivables carried at amortized cost (excluding trade and other receivables)	**653.7**	**91.4**	**745.1**	**610.7**	**109.7**	**720.4**
Loans granted to affiliated companies [a]	430.5	50.0	480.5	405.8	66.3	472.1
Other receivables at amortized cost	0.3	–	0.3	2.6	–	2.6
Concession receivables	222.4	41.3	263.7	201.6	43.4	245.0
Finance lease receivables	0.5	0.1	0.6	0.7	–	0.7
Trade and other receivables	**–**	**4,670.9**	**4,670.9**	**–**	**4,584.0**	**4,584.0**
Total	**653.7**	**4,762.3**	**5,416.0**	**610.7**	**4,693.7**	**5,304.4**

(a) This item primarily includes loans granted to associates accounted for under the equity method and to non-consolidated companies, and amounted to EUR 288.6 million as of December 31, 2019, *versus* EUR 283.8 million as of December 31, 2018.

Depreciation and impairment on loans and receivables carried at amortized cost are shown below:

	December 31, 2019			December 31, 2018		
(in millions of euros)	Gross	Depreciation and impairment	Net	Gross	Depreciation and impairment	Net
Loans and receivables carried at amortized cost (excluding trade and other receivables)	909.3	(164.2)	745.1	843.0	(122.6)	720.4
Trade and other receivables	5,018.8	(347.9)	4,670.9	4,940.1	(356.1)	4,584.0
Total	**5,928.1**	**(512.1)**	**5,416.0**	**5,783.1**	**(478.7)**	**5,304.4**

Information on the maturity of receivables that are past due but not impaired and on the monitoring of counterparty risk on loans and receivables at amortized cost (including trade and other receivables) is presented in Note 14.2 "Counterparty risk".

Net income and expenses on loans and receivables carried at amortized cost and recognized in the income statement break down as follows (including trade receivables):

		Remeasurement post-acquisition	
(in millions of euros)	Interests	Translation adjustment	Impairment
At December 31, 2018	56.9	(6.4)	(27.0)
At December 31, 2019	**58.1**	**1.0**	**(24.8)**

Trade and other receivables

On initial recognition, trade receivables are recorded at fair value, which generally corresponds to their nominal value. An impairment loss is recognized based on the risk of non-recovery by homogeneous category of customers and on the expected loss rate for each category of customers (see Note 1.5.9.1).

The net carrying amount of trade and other receivables posted to the statement of financial position represents its measurement of fair value.

13.1.3 Financial assets measured at fair value

This item comprises derivative financial instruments as well as financial assets measured at fair value through income or loss excluding derivatives, and can be analyzed as follows:

	December 31, 2019			December 31, 2018		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Derivative financial instruments	**115.7**	**75.5**	**191.2**	**119.0**	**97.6**	**216.6**
Debt-related derivatives (see Note 13.3.1)	111.3	44.0	155.3	111.4	67.9	179.3
Derivative hedging commodities (see Note 14.1.1.2)	–	7.8	7.8	–	0.7	0.7
Derivative hedging other items [a]	4.4	23.7	28.1	7.6	29.0	36.6
Financial assets at fair value through income exluding derivatives	**–**	**29.8**	**29.8**	**–**	**29.2**	**29.2**
Financial assets measured at fair value through income (see Note 13.3.1)	–	29.8	29.8	–	29.2	29.2
Total	**115.7**	**105.3**	**221.0**	**119.0**	**126.8**	**245.8**

(a) Includes derivative financial instruments:
– for the interest rate futures portion of debt-related derivatives not designated as hedges for EUR 1.9 million at December 31, 2019, compared with EUR 4.5 million at December 31, 2018.

Commodities derivatives, debt-related derivatives, and derivatives hedging other items are set up as part of the Group's risk management policy and are analyzed in Note 14.1.1.

Financial assets measured at fair value through income (excluding derivatives) are mainly UCITS and negotiable medium-term notes (MTNs); which are included in the calculation of the Group's net debt (see Note 13.3).

Income recognized on all financial assets measured at fair value through income as of December 31, 2019 is not significant.

13.1.4 Cash and cash equivalents

The Group's financial risk management policy is described in Note 14.

"Cash and cash equivalents" amount to EUR 3,703.0 million as of December 31, 2019 *versus* EUR 3,424.1 million as of December 31, 2018.

This item mainly includes term deposits for EUR 749.3 million compared with EUR 699.8 million at December 31, 2018 and cash and cash equivalents for EUR 2,889.6 million compared with EUR 2,669.2 million at 31 December 2018, including EUR 130.0 million in liquid financial investments as at December 31, 2019 (excluding accrued interest).

In addition, restricted cash amounts to EUR 17.3 million as of December 31, 2019.

Income recognized in respect of "Cash and cash equivalents" as of December 31, 2019 amounts to EUR 10.1 million *versus* EUR 24.0 million as of December 31, 2018.

13.1.5 Pledged and mortgaged assets

(in millions of euros)	December 31, 2019	December 31, 2018
Pledge and mortgaged assets	7.1	12.1

13.2 Financial liabilities

Financial liabilities are accounted for:

- in "liabilities at amortized cost" for borrowings and debt, trade and other payables, and other financial liabilities;
- or in "liabilities measured at fair value" for derivative financial instruments.

The following table shows the various financial liability categories as of December 31, 2019, as well as their breakdown as "non-current" and "current":

	December 31, 2019			December 31, 2018		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Borrowings	9,914.0	2,609.1	12,523.1	9,803.2	2,762.1	12,565.3
Lease liabilities	1,159.4	314.9	1,474.3	–	–	–
Derivative financial instruments	6.7	57.3	64.0	9.5	47.2	56.7
Trade and other payables	–	3,534.3	3,534.3	–	3,798.9	3,798.9
Other financial liabilities	42.8	–	42.8	47.2	–	47.2
Total	**11,122.9**	**6,515.6**	**17,638.5**	**9,859.9**	**6,608.2**	**16,468.1**

13.2.1 Borrowings and debt

	December 31, 2019			December 31, 2018		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Bonds issues	9,009.1	465.4	9,474.5	8,921.9	844.5	9,766.4
Commercial paper	–	678.4	678.4	–	641.8	641.8
Draw downs on credit facilities	302.2	43.7	345.9	288.0	31.1	319.1
Borrowings under finance leases [a]	–	–	–	53.4	33.8	87.2
Other bank borrowings	426.3	130.9	557.2	408.8	75.6	484.4
Other borrowings	157.5	64.3	221.8	144.2	79.6	223.8
Borrowings (gross amounts)	**9,895.1**	**1,382.7**	**11,277.8**	**9,816.3**	**1,706.4**	**11,522.7**
Overdrafts and current cash accounts	–	1,133.6	1,133.6	–	928.8	928.8
Outstanding financial debt	**9,895.1**	**2,516.3**	**12,411.4**	**9,816.3**	**2,635.2**	**12,451.5**
Impact of measurement at amortized cost	(59.2)	81.3	22.1	(82.0)	123.6	41.6
Impact of fair value hedge	78.1	11.5	89.6	68.9	3.3	72.2
Borrowings and debt	**9,914.0**	**2,609.1**	**12,523.1**	**9,803.2**	**2,762.1**	**12,565.3**

(a) As of December 31, 2019, the amounts on this line are reclassified as lease liabilities following the application of IFRS 16.

The fair value of borrowings and debt as of December 31, 2019 amounts EUR 13,908.4 million for a net book value of EUR 12,523.1 million (for details see Note 13.4.2).

Borrowings are analyzed in Note 13.3 "Net debt".

Variations by flows of financial debts are presented in the following table:

(in millions of euros)	December 31, 2018	IFRS 16 [b]	January 1, 2019	Cash flows	Non cash flows: Forex effect	Non cash flows: Scope effect	Non cash flows: Change in fair value and amortized cost	Others	December 31, 2019
Bond issues	9,766.4	–	9,766.4	(257.2)	(34.7)	–	–	–	9,474.5
Commercial paper	641.8	–	641.8	37.0	(0.4)	–	–	–	678.4
Draw downs on credit facilities	319.1	–	319.1	28.4	–	0.7	–	(2.3)	345.9
Borrowings under finance leases	87.2	(87.2)	–	–	–	–	–	–	–
Other bank borrowings	484.4	–	484.4	67.6	(6.4)	8.8	–	2.8	557.2
Other borrowings	223.8	–	223.8	(0.5)	1.8	(16.9)	–	13.6	221.8
Borrowings (gross amounts)	**11,522.7**	**(87.2)**	**11,435.5**	**(124.7)**	**(39.7)**	**(7.4)**	**–**	**14.1**	**11,277.8**
Overdrafts and current cash accounts [a]	928.8	–	928.8	212.2	(7.1)	0.2	–	(0.5)	1,133.6
Outstanding financial debt	**12,451.5**	**(87.2)**	**12,364.3**	**87.5**	**(46.8)**	**(7.2)**	**–**	**13.6**	**12,411.4**
Impact of measurement at amortized cost	41.6	–	41.6	(11.1)	(1.1)	(8.0)	(9.4)	10.1	22.1
Impact of fair value hedge	72.2	–	72.2	–	–	–	17.4	–	89.6
Borrowings and debt	**12,565.3**	**(87.2)**	**12,478.1**	**76.4**	**(47.9)**	**(15.2)**	**8.0**	**23.7**	**12,523.1**
Lease liabilities	**–**	**1,459.9**	**1,459.9**	**(325.1)**	**3.8**	**0.8**	**–**	**334.9**	**1,474.3**

(a) The change in bank overdrafts due on demand, as defined by IAS 7.8, does not impact the item "Increase in financial liabilities" in the consolidated statement of cash flows for an amount of EUR 123.2 million, but is nevertheless taken into account in the 2019 cash flows of financial liabilities.
(b) See Note 1.2.3.

13.2.2 Derivative financial instruments (including commodities)

(in millions of euros)	December 31, 2019			December 31, 2018		
	Non-current	Current	Total	Non-current	Current	Total
Debt-related derivatives	0.4	41.5	41.9	3.6	17.6	21.2
Derivatives hedging commodities	–	4.3	4.3	–	7.5	7.5
Derivatives hedging other items [a]	6.3	11.5	17.8	5.9	22.1	28.0
Total	**6.7**	**57.3**	**64.0**	**9.5**	**47.2**	**56.7**

(a) Mainly includes derivative financial instruments for the interest rate futures portion of debt-related derivatives qualifying as cash flow hedge for EUR 3.5 million at December 31, 2019, compared with EUR 2.5 million at December 31, 2018.

These instruments are set up according to the Group's risk management policy and are analyzed in Note 14.

13.2.3 Trade and other payables

(in millions of euros)	December 31, 2019	December 31, 2018
Trade payables	3,260.7	3,527.2
Payables on fixed assets	273.6	271.7
Total	**3,534.3**	**3,798.9**

The fair value of trade payables and other creditors correspond to their carrying amount recorded in the statement of financial position.

13.2.4 Other financial liabilities

(in millions of euros)	December 31, 2019	December 31, 2018
Payables on acquisition of shares	4.9	6.9
Other financial liabilities [a]	37.9	40.3
Total	**42.8**	**47.2**

(a) Including EUR 27.8 million in 2019 and EUR 30.0 million in 2018 related to the financing of the expansion of an Australian landfill.

13.3 Net debt

13.3.1 Analysis by type of debt

(in millions of euros)	December 31, 2019 Non-current	Current	Total	December 31, 2018 Non-current	Current	Total
Outstanding borrowings	9,895.1	2,516.3	12,411.4	9,816.3	2,635.2	12,451.5
Impact of measurement at amortized cost [a]	(59.2)	81.3	22.1	(82.0)	123.6	41.6
Impact of fair value hedge [b]	78.1	11.5	89.6	68.9	3.3	72.2
Borrowings and debts	**9,914.0**	**2,609.1**	**12,523.1**	**9,803.2**	**2,762.1**	**12,565.3**
Lease liabilities	**1,159.4**	**314.9**	**1,474.3**	**–**	**–**	**–**
Debt-related derivatives under liabilities [c]	0.4	41.5	41.9	3.6	17.6	21.2
Gross debt	**11,073.8**	**2,965.5**	**14,039.3**	**9,806.8**	**2,779.7**	**12,586.5**
Financial assets measured at fair value through income excluding financial derivative instruments	–	(29.8)	(29.8)	–	(29.2)	(29.2)
Cash management assets	–	(130.0)	(130.0)	–	–	–
Other cash and cash equivalents	–	(3,573.0)	(3,573.0)	–	(3,424.1)	(3,424.1)
Debt-related derivatives under assets [c]	(111.3)	(44.0)	(155.3)	(111.4)	(67.9)	(179.3)
Net cash	**(111.3)**	**(3,776.8)**	**(3,888.1)**	**(111.4)**	**(3,521.2)**	**(3,632.6)**
Net debt	**10,962.5**	**(811.3)**	**10,151.2**	**9,695.4**	**(741.5)**	**8,953.9**
Outstanding borrowings	9,895.1	2,516.3	12,411.4	9,816.3	2,635.2	12,451.5
Lease liabilities	1,159.4	314.9	1,474.3	–	–	–
Financial assets measured at fair value through income excluding financial derivative instruments	–	(29.8)	(29.8)	–	(29.2)	(29.2)
Cash management assets	–	(130.0)	(130.0)	–	–	–
Other cash and cash equivalents	–	(3,573.0)	(3,573.0)	–	(3,424.1)	(3,424.1)
Net debt excluding amortized cost and impact of derivative financial instruments	**11,054.5**	**(901.6)**	**10,152.9**	**9,816.3**	**(818.1)**	**8,998.2**

(a) Includes accrued interest on gross debt as well as premiums and fees for setting up borrowings to be amortized.
(b) This item corresponds to the remeasurement of the interest rate component of debt in a designated fair value hedging relationship.
(c) It corresponds to the fair value of debt-related derivatives, regardless of whether or not they are designated as hedges.

The increase in the non-current portion of net debt as of December 31, 2019 is primarily due to:

- the recognition of lease liabilities for a non-current amount of EUR 1,159.4 million;
- the issue by SUEZ of a EUR 700 million bond in October 2019, maturing on October 14, 2031;
- the issue by SUEZ Water Ressources LLC of USD 245 million (EUR 218 million) in bonds in November 2019.

Partially offset by:

- the reclassification of the Oceane bond issued by SUEZ for an amount of EUR 311 million, maturing in February 2020;
- the reclassification of the bond issued by SUEZ for an amount of EUR 100 million, maturing in April 2020;
- the partial redemptions made on certain notes in October 2019 for a total amount of EUR 449.7 million (see Note 2.5).

The sensitivity of the debt (including interest rate and currency derivatives) to interest rate risk and currency risk is presented in Note 14.

13.3.2 Issue of Undated Deeply Subordinated Notes

On September 12, 2019, SUEZ issued new Undated Deeply Subordinated Notes for a total amount of EUR 500 million. The new notes will bear interest at a fixed rate of 1.625%, revised for the first time seven years after issue, then every five years. The funds raised have been allocated to buy back the notes issued in June 2014 for an amount of EUR 352.1 million.

At December 31, 2019, the outstanding amount of Undated Deeply Subordinated Notes is EUR 1,747.9 million, compared with EUR 1,600 million at December 31, 2018. These lines are not recognized in financial debt as they meet the conditions required by IAS 32 to be recognized in equity.

13.3.3 Bond and Commercial paper issues

On October 14, 2019, SUEZ issued new 12-year senior bonds for a total amount of EUR 700 million. The new bonds will bear interest at a fixed rate of a 0.500% per year.

The funds raised have been allocated to refinance the partial buyback of existing bonds for a total nominal amount of EUR 449.7 million:

- EUR 151.8 million of an initial amount of EUR 750 million with a 4.078% coupon, maturing in 2021;
- EUR 135.3 million of an initial amount of EUR 750 million with a 4.125% coupon, maturing in 2022;
- EUR 123.6 million of an initial amount of EUR 500 million with a 2.750% coupon, maturing in 2023;
- EUR 39.0 million of an initial amount of EUR 500 million with a 5.500% coupon, maturing in 2024.

SUEZ has a commercial paper program. At December 31, 2019, the outstanding notes totaled EUR 678.4 million.

Commercial paper is recognized as current financial debt. However, the Group's policy is to back all commercial paper by available credit lines. Thus, the refinancing of commercial paper is guaranteed even in case of closure of the money market.

At December 31, 2019, outstanding commercial paper was entirely covered by confirmed available for more than one-year credit lines.

13.3.4 Securitization of receivables

Context

In 2012, SUEZ implemented a program for the sales of trade receivables to a special purpose vehicle (SPV) called *Fonds Commun de Titrisation* (or FCT).

This so-called "deconsolidation" program concerns assignors from R&R France, IWS France, R&R Netherlands, R&R UK and R&R Germany.

In April 2017, this program was renewed for five years, and the scope of the transferred receivables portfolio was amended: the assignor, SUEZ R&R UK was removed and new French assignors from the OSIS division of SUEZ RV France joined that program.

As of the end of December 2019, the assignors from the OSIS division of SUEZ RV France are no longer part of the scope of the transferred receivables.

The aim of the receivable assignment or receivable securitization program is to carry out so-called "deconsolidation" assignments within the meaning of IFRS 9, their receivables are therefore recorded in the financial statements against a financial debt materializing the commitment to pay the fixed amount of the repurchase of these receivables.

The main characteristics of the program are as follows:

a) a compartment dedicated to the Group's receivables was created within a FCT;

b) the FCT used in the program is financing the compartment by issuing three types of instruments:

   - shares known as "senior", issued on the markets through a dedicated channel,
   - a deposit known as "mezzanine", underwritten by the Group,
   - shares known as "subordinated", underwritten by an investor taking part in the program and with contracted involvement with the Group;

c) these shares are presented here in order of payment priority related to each other; the senior shares are therefore the first to be reimbursed and the subordinated shares are the last;

d) the Group's subsidiaries involved remain in charge of recovering the receivables transferred against remuneration.

The sales of receivables are made by Group subsidiaries at their nominal value, minus a discount that covers the cost of financing the receivables, the risk of late payment and the credit risk.

The main commitments of the Group towards the securitization fund are the following:

e) set-up of a security deposit for the compartment, earning interest, and designed to cover, if the FCT reserves and the "subordinated" shares ever came to run out, any defaults and late payments on transferred receivables exceeding the amount estimated during the transfer and invoiced through the discount applied to the transfer price, to a set maximum limit (Cash Collateral 1 or CC1); this deposit is effective from the launch of the program and corresponds to the "mezzanine" deposit presented above;

f) set-up of a security deposit for the compartment, earning interest, and designed to preserve the correct execution of all financial obligations of Group entities party to the program, to a set maximum limit (Cash Collateral 2 or CC2); this deposit is only effective if certain events or triggers occur linked to the downgrading of SUEZ or to the non-respect by the Group of its contractual obligations.

   At December 31, 2019, this security deposit had not yet been formed;

g) an option, for all Group's subsidiaries, to jointly request buyback at fair value of the receivables held by the compartment in a single and unique transaction, in case of program amortization, planned (with a 5-year term), or accelerated, and after agreement with the holders of "subordinated" shares. To date, accelerated amortization of the program is not expected before its maturity date;

h) issue of a guarantee for the risk of modification of tax rules;

i) preservation by each Group's subsidiary of the follow-up and collection of receivables that it has transferred to the compartment; to this effect, a follow-up and collection agreement was signed by each of the subsidiaries acting as collector and by the compartment, this service being remunerated by FCT.

The Group remains exposed to the risks linked to the receivables transferred within the limit of the security deposits.

However, the discount applied to the sales and the sizing of the "subordinated" shares allow almost all possible losses of the compartment to be absorbed. The probability that the "mezzanine" deposit is impacted is very low. Finally, the holders of the "subordinated" shares benefit from almost all the advantages through excess fees more favorable than those attributable to the Group, and the granting of the liquidation profit.

Accounting treatment

The compartment of the FCT is not controlled by the Group and is therefore not consolidated.

According to IFRS 9 and based on the terms of the program and the quantitative analyses implemented, the Group transferred almost all the risks and rewards inherent to the ownership of the receivables sold. The receivables transferred within the scope of the program are therefore fully derecognized from the Group's consolidated statement of financial position.

The loss arising from the sale of these receivables, through the applied discount, is recorded in the income statement under financial expenses (see Note 6).

The security deposit paid and representing the "mezzanine" shares underwritten by the Group is recorded under the item "Loans and receivables carried at amortized cost" on the Group's consolidated statement of financial position. Its remuneration is recorded in the income statement under financial income (see Note 6).

The remuneration of services provided by the Group for follow-up and recovery of receivables transferred is shown in the income statement under financial income (see Note 6).

The figures as of December 31, 2019 are presented below

(in millions of euros)

Total of receivables sold over the period	**2,539.1**	
Gain/(loss) arising from sale over the period	(20.4)	(B)
Remuneration for CC1	2.4	(C)
Remuneration of services for follow-up and recovery of receivables transferred over the period	**11.5**	**(D)**
Outstanding receivables transferred as of December 31, 2019	441.7	(A)
Book value of CC1 as of December 31, 2019	97.4	(E)
Fair value of CC1	97.4	
Book value of CC2	(a)	
Residual maturity of CC1	26	months
Impact of sales of derecognized receivables in the sense of IFRS 9 on net debt	**337.8**	**(A) + (B) + (C) + (D) – (E)**

(a) No security deposit known as "CC2" had been made as of December 31, 2019; payment of this deposit is subject to the conditions described above.

13.3.5 Change in net debt

Net debt increased by EUR 1,197.3 million during the year 2019. This is mainly due to:

- the payment of cash dividends to shareholders of SUEZ amounting to EUR 401.8 million;
- the payment of coupons on the various undated deeply subordinated notes for a total amount of EUR 47.1 million;
- the payment of cash dividends to minority shareholders of subsidiaries amounting to EUR 266.8 million;
- the recognition of lease liabilities for an amount of EUR 1,442.7 million;
- the disposal of 20% of SUEZ Group's regulated business activities in the United States for an amount of EUR 510.2 million;
- the net impact of EUR 222.5 million after the SUEZ Group and the Argentinean government settled their dispute over the Buenos Aires water treatment concession terminated in 2006;
- the exchange rate fluctuations that generated a EUR 26.2 million increase in net financial debt, mainly due to the appreciation of the US dollar against the euro;
- the changes in net cash from refinancing related to undated deeply subordinated notes, which led to a EUR 134.1 million decrease in net debt (see Note 2.5);
- excess cash generated by the Group's activities which generated a decrease in net debt of EUR 202.9 million.

13.3.6 Debt/equity ratio

(in millions of euros)	December 31, 2019	December 31, 2018
Net debt [a]	10,151.2	8,953.9
Total equity	9,288.2	8,992.6
Debt/equity ratio	**109.3%**	**99.6%**

(a) Includes lease liabilities for EUR 1,474.3 million at December 31, 2019, *versus* EUR 87.2 million of finance lease liability at December 31, 2018, before IFRS 16 application.

13.4 Fair value of financial instruments by level

13.4.1 Financial assets

Equity instruments at fair value

Listed securities are recognized in the consolidated statement of financial position at fair value for EUR 22.2 million at December 31, 2019. They have a Level 1 fair value based on stock market prices at that date.

Unlisted securities valued at EUR 110.0 million at December 31, 2019 are measured using valuation models based primarily on the most recent transactions, discounted dividends or cash flows and net asset value (fair value Level 3).

As of December 31, 2019, the change in Level 3 equity instruments at fair value breaks down as follows:

(in millions of euros)	Equity instruments at JV through OCI	Equity instruments at JV through income
At December 31, 2018	**105.0**	**5.8**
Acquisitions	15.9	–
Net book value of disposals	(8.0)	(3.5)
Changes in fair value posted to equity as other comprehensive income	3.0	–
Changes in fair value posted to income statement	–	1.7
Changes in scope, exchange rates and other	(10.7)	0.8
At December 31, 2019	**105.2**	**4.8**

The net value of unlisted securities is not of a significant uniform amount that would have to be presented separately.

Loans and receivables carried at amortized cost (excluding trade and other receivables)

Loans and receivables carried at amortized cost (excluding trade and other receivables), amounting to EUR 745.1 million at December 31, 2019, may contain elements that contribute to a fair value hedging relationship. At December 31, 2019, no hedge was put in place.

Derivative financial instruments

The portfolio of derivative financial instruments used by the Group within the context of its risk management consists primarily of interest rate and exchange rate swaps, interest rate options and forward currency sales and purchases. It is recognized at its fair value at December 31, 2019 for EUR 191.2 million. The fair value of virtually all of these contracts is determined using internal valuation models based on observable data. These instruments are considered Level 2.

Financial assets measured at fair value through income

Financial assets measured at fair value through income, amounting to EUR 29.8 million at December 31, 2019, are considered Level 2. In fact, their fair value is determined based on observable data.

13.4.2 Financial liabilities

The fair value of financial liabilities and financial instruments posted to liabilities are distributed as follows among the various levels of fair value (fair value levels are defined in Note 1.5.9.2):

	December 31, 2019				December 31, 2018			
(in millions of euros)	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings	**13,908.4**	**7,498.3**	**6,410.1**		**13,503.7**	**7,895.6**	**5,608.1**	
Derivative financial instruments	**64.0**		**64.0**		**56.7**		**56.7**	
Debt-related derivatives	41.9		41.9		21.2		21.2	
Derivatives hedging commodities	4.3		4.3		7.5		7.5	
Derivatives hedging other items	17.8		17.8		28.0		28.0	
Total	**13,972.4**	**7,498.3**	**6,474.1**	**–**	**13,560.4**	**7,895.6**	**5,664.8**	**–**

Bonds and borrowings

Only listed bonds issued by SUEZ are presented in this table at Level 1. Other bonds are shown in this table at Level 2. All of these loans are measured in light of the interest rate risk (interest rate component); their fair value is determined on the basis of observable data.

Derivative financial instruments

See Note 13.4.1 for details on fair value level.

13.5 Offsetting of derivative assets and liabilities

At December 31, 2019, as at December 31, 2018, the Group does not offset financial assets and liabilities in its statement of financial position. Moreover, SUEZ has subscribed for OTC derivatives with first class banks under agreements that provide for the compensation of amounts due and receivable in the event of failure of one of the contracting parties. These master netting agreements do not meet the criteria of IAS 32 to allow the offsetting of derivative assets and liabilities in the statement of financial position. However, they do fall within the scope of disclosures under IFRS 7 on offsetting:

	December 31, 2019				December 31, 2018			
	Financial derivatives instruments on net debt and others		Financial derivatives instruments on commodities		Financial derivatives instruments on net debt and others		Financial derivatives instruments on commodities	
(en millions d'euros)	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Gross amount [a]	183.4	(59.7)	7.8	(4.3)	215.9	(49.2)	0.7	(7.5)
Amount after offsetting	**170.9**	**(47.2)**	**7.8**	**(4.3)**	**168.4**	**(1.7)**	**0.8**	**(7.5)**

(a) Gross amounts of recorded assets and liabilities.

Note 14 Management of risks arising from financial instruments

The Group mainly uses derivative instruments to manage its exposure to market risks. The management of financial risks is explained in chapter 8 "Cash and shareholders' equity" of the Universal Registration Document.

14.1 Market risks

14.1.1 Commodity market risks

14.1.1.1 Hedging operations

The Group sets up cash flow hedge on fuel and electricity as defined by IFRS 9 by using the derivative instruments available on over-the-counter markets, whether they are firm commitments or options, but always settled in cash. The Group's aim is to protect itself against adverse changes in market prices, which may specifically affect its supply costs.

14.1.1.2 Fair value of derivative instruments linked to commodities

The fair value of derivative instruments linked to commodities at December 31, 2019 and 2018 is presented in the table below:

	December 31, 2019				December 31, 2018			
	Assets		Liabilities		Assets		Liabilities	
(in millions of euros)	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Cash flow hedges	7.8	–	4.3	–	0.7	–	7.5	–
Total	**7.8**	**–**	**4.3**	**–**	**0.7**	**–**	**7.5**	**–**

The fair value of cash flow hedging instruments by type of commodity breaks down as follows:

	December 31, 2019				December 31, 2018			
	Assets		Liabilities		Assets		Liabilities	
(in millions of euros)	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Oil	**7.8**	**–**		**–**	**0.7**	**–**	**–**	**–**
Swaps	7.8	–		–	0.7	–	–	–
Electricity	**–**	**–**	**4.3**	**–**		**–**	**7.5**	**–**
Swaps	–	–	4.3	–		–	7.5	–
Total	**7.8**	**–**	**4.3**	**–**	**0.7**	**–**	**7.5**	**–**

14.1.2 Currency risk

Subsidiaries work mostly in local currency, exposure to currency risk linked to transactions are limited.

Translation risk is mainly concentrated on equity holdings in the United States, United Kingdom, Chile, China and Australia. The Group's hedging policy with regard to investments in non-Eurozone currencies consists in contracting liabilities denominated in the same currency as the cash flows expected to derive from the hedged assets.

Among the hedging instruments used, borrowings in the relevant currency constitute the most natural hedging tool. The Group also uses foreign currency derivatives (swaps, cross currency swaps...), which allow for the creation of synthetic currency debts.

14.1.2.1 Analysis of financial instruments by currency

The breakdown by currency of outstanding borrowings and of financial net debt, before and after taking interest rate and currency hedges into account, is presented below:

Outstanding borrowings

	December 31, 2019		December 31, 2018	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Euro zone	75%	57%	77%	51%
USD zone	10%	21%	7%	22%
GBP zone	2%	4%	2%	4%
CLP (Chilean peso)	10%	10%	10%	10%
HKD (Hong-Kong dollar)	1%	2%	1%	6%
Other currencies	2%	6%	3%	7%
Total	**100%**	**100%**	**100%**	**100%**

Net debt

	December 31, 2019		December 31, 2018	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Euro zone	77%	52%	80%	43%
USD zone	11%	27%	8%	29%
GBP zone	3%	6%	3%	5%
CLP (Chilean peso)	12%	12%	12%	12%
HKD (Hong-Kong dollar)	0%	2%	0%	8%
Other currencies	–3%	1%	–3%	3%
Total	**100%**	**100%**	**100%**	**100%**

14.1.2.2 Analysis of currency risk sensitivity

The sensitivity analysis was based on the financial net debt position (including derivative financial instruments), and derivatives designated as net investment hedges at the reporting date. At December 31, 2019 as at December 31, 2018, there was no instrument as a net investment hedge.

As regards **currency risk**, the sensitivity calculation consists in evaluating the impact in the Consolidated Financial Statements of a plus or minus 10% change in foreign exchange rates compared to closing rates.

Impact on income after the impact of foreign exchange derivatives

Changes in exchange rates against the euro only affect income through gains and losses on liabilities denominated in a currency other than the functional currency of the companies carrying the liabilities on their statement of financial position, and to the extent that these liabilities do not qualify as net investment hedges. A uniform plus or minus 10% change of foreign currencies against euro would generate a gain or a loss of EUR 6.5 million.

Impact on equity after taking into account foreign exchange derivatives

At December 31, 2019 as at December 31, 2018, there were no financial liabilities (debts and derivatives) qualified as net investment hedges. A uniform variation of plus or minus 10% in exchange rates against the euro would therefore not generate a negative or positive impact on equity in respect of net investment hedges.

14.1.3 Interest rate risk

The Group aims to reduce its financing costs by limiting the impact of interest rate fluctuations on its income statement.

The Group's policy is to diversify net debt interest rate references between fixed and floating rates. The Group's aim is to achieve a balanced interest rate structure for its net debt in the medium term (5 to 15 years). The interest rate mix may change depending on market trends.

The Group therefore uses hedging instruments (particularly swaps), to protect itself from increases in rates in the currencies in which the debt is denominated.

In 2014 and 2015, in order to protect the refinancing of parts of its debt, the Group set up nine-year Interest rate hedges with deferred departures in 2018. They were decided and backed by the bond issue carried out on September 17, 2018.

The Group's exposure to interest rate risk is managed centrally and regularly reviewed (generally on a monthly basis) during meetings of the Treasury Committee. Any significant change in the interest rate mix is subject to prior approval by Management.

The cost of debt is sensitive to changes in interest rates on all floating-rate debt. The cost of debt is also affected by changes in market value of derivative instruments not classified as hedges under IFRS 9.

The Group's main exposure to interest rate risk arises from loans and borrowings denominated in euro, US dollar, pound sterling, Chilean peso and Hong-Kong dollar, which represented 99% of net debt as of December 31, 2019.

14.1.3.1 Financial instruments by rate type

The breakdown by type of rate of outstanding borrowings and net debt, before and after impact of hedging instruments, is shown in the following tables:

Outstanding borrowings

	December 31, 2019		December 31, 2018	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Floating rate	20%	33%	17%	33%
Fixed rate	71%	58%	74%	58%
Fixed rate indexed to inflation	9%	9%	9%	9%
Total	**100%**	**100%**	**100%**	**100%**

Net debt

	December 31, 2019		December 31, 2018	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Floating rate	-16%	3%	-17%	6%
Fixed rate	103%	84%	105%	82%
Fixed rate indexed to inflation	13%	13%	12%	12%
Total	**100%**	**100%**	**100%**	**100%**

The inflation-linked debt corresponds exclusively to securities issued by Aguas Andinas in Chile. It involves fixed-rate bonds denominated in Unidad de Fomento (a Chilean monetary adjusted for inflation).

14.1.3.2 Analysis of interest rate risk sensitivity

The sensitivity analysis was based on the net debt position as at the reporting date (including financial instruments with an interest rate component).

For **interest rate risk**, the sensitivity is calculated based on the impact of a rate change of plus or minus 1% compared with year-end interest rates.

Impact on income after taking into account interest rate derivatives

A plus or minus 1% change in short-term interest rates (for all currencies) on the nominal amount of floating-rate net debt, inflation-linked debt included, and the floating-rate component of derivatives would have a negative or positive impact of EUR 2.2 million on net interest expense.

A 1% increase in all interest rates (uniform for all currencies) would generate a loss of EUR 0.7 million in the income statement due to the change in fair value of non-qualified derivatives. A 1% decrease in interest rates would a contrario generate a gain of EUR 0.5 million.

Impact on equity after taking into account interest rate derivatives

An increase of 1% in all interest rates (uniform for all currencies) would generate a gain of EUR 3.5 million in equity, linked to the change in fair value for derivatives documented as cash flow hedges and accounted for in the statement of financial position. On the other hand, a decrease of 1% would generate a loss of EUR 2.4 million.

The asymmetrical impacts are attributable to the low short-term interest rates (less than 1%) applicable to certain financial assets and liabilities.

14.1.4 Currency and interest rate risk hedges

The fair values and notional amounts of the financial derivative instruments used to hedge currency and interest rate risks are as follows:

Foreign currency derivatives

	December 31, 2019		December 31, 2018	
(in millions of euros)	Total market value	Total nominal value	Total market value	Total nominal value
Fair-value hedges	0.6	66.3	(3.8)	359.4
Cash-flow hedges	0.1	3.4	0.1	6.9
Net investment hedges	–	–	–	–
Derivative instruments not qualifying for hedge accounting	7.0	3,968.1	52.3	3,758.2
Total	**7.7**	**4,037.8**	**48.6**	**4,124.5**

Interest rate derivatives

	December 31, 2019		December 31, 2018	
(in millions of euros)	Total market value	Total nominal value	Total market value	Total nominal value
Fair-value hedges	106.0	1,762.9	107.4	2,100.0
Cash-flow hedges	(3.5)	92.0	–	7.1
Derivative instruments not qualifying for hedge accounting	–	–	(2.4)	161.6
Total	**102.5**	**1,854.9**	**105.0**	**2,268.7**

The market values shown in the table above are positive for an asset and negative for a liability.

The Group defines foreign currency derivatives hedging by firm foreign currency commitments, and instruments transforming fixed-rate debt into floating-rate debt, as fair-value hedges.

Cash-flow hedges correspond mainly to hedges of future operating cash flows in foreign currency and the hedging of floating-rate debt.

Interest rate derivatives not designated as hedges consist of structured instruments, which because of their type and because they do not meet the effectiveness criteria defined in IFRS 9, cannot be qualified as hedges for accounting purposes.

Foreign currency derivatives not designated as hedges provide financial cover for foreign currency commitments. Furthermore, the effect of foreign currency derivatives is almost entirely offset by translation adjustments on the hedged items.

Fair-value hedges

As of December 31, 2019, the net impact of fair value hedges recognized in the income statement, including compensation payments and redemption premium is EUR 9.9 million.

Cash flow hedges

The breakdown by maturity of the market value of the foreign currency and interest rate derivatives designated as cash flow hedges is as follows:

At December 31, 2019 *(in millions of euros)*	Total	2020	2021	2022	2023	2024	> 5 years
Fair value of derivatives by maturity date	(3.5)	0.1	–	–	(1.0)	(2.1)	(0.5)

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	> 5 years
Fair value of derivatives by maturity date	(0.1)	–	(0.1)	–	–	–	–

The unrealized gains and losses directly recognized in shareholders' equity, Group share in 2019 amount to EUR (10.5) million (including impacts on associates).

The ineffective portion of cash-flow hedges recognized in income is nil.

14.2 Counterparty risk

Through its operational and financial activities, the Group is exposed to the risk of default on the part of its counterparties (customers, suppliers, associates, intermediaries, banks) in the event that they find it impossible to meet their contractual obligations. This risk arises from a combination of payment risk (non-payment of goods or services rendered), delivery risk (non-delivery of goods or services already paid), and replacement risk on defaulting contracts (called Mark-to-Market exposure and corresponding to the risk that replacement terms will be different from the initially agreed terms).

14.2.1 Operating activities

Trade and other receivables

The gross maturity of past-due trade and other receivables is broken down below:

Trade and other receivables *(in millions of euros)*	Past-due non impaired assets at closing date				Impaired assets [a]	Non-impaired and not past-due assets	Total
	0-6 months	6-12 months	Over one year	Total	Total	Total	
At December 31, 2019	283.1	35.5	49.6	368.2	461.0	4,189.6	5,018.8
At December 31, 2018	316.3	61.8	110.5	488.6	473.1	3,978.4	4,940.1

(a) This figure corresponds to the nominal value of trade and other receivables that are partially or fully depreciated.

The ageing of receivables that are past due but not impaired may vary significantly depending on the type of customer which the Group companies do business with (private companies, individuals or public authorities). In accordance with the terms of IFRS 9, since January 1, 2018, the entities of the SUEZ Group have set up non-recovery risk matrices for their trade receivables by homogeneous category of customers, adapted to their local realities, with regard to the default rates observed in the recent past on receivables with a similar credit risk profile. They update the matrices at least once a year and use them to calculate depreciation based on the expected default rates on each of the homogeneous categories of customers (see Note 1.5.9.1).

Changes in the impairment on trade and other receivables line:

(in millions of euros)	Impairment on trade and other receivables
At December 31, 2018	**(356.1)**
Additional credit risk allowances	(115.8)
Reversals for risk surplus/extinction	68.2
Reversal by the counterpart of loss on bad trade receivables	52.8
Change in scope, exchange rates and other	2.9
At December 31, 2019	**(347.9)**

Other assets

In "Other assets", the proportion of depreciated assets is not material in relation to the total amount of the item. Moreover, the Group does not consider that it is exposed to any counterparty risk on those assets.

14.2.2 Financial activities

The Group's maximum exposure to counterparty risk in its financial activities may be measured in terms of the carrying amount of financial assets excluding equity instrument and the fair value of derivatives on the assets side of the statement of financial position (*i.e.* EUR 9,340.1 million at December 31, 2019, and EUR 8.974,3 million at December 31, 2018 restated).

14.2.2.1 Counterparty risk arising from loans and receivables carried at amortized cost (excluding trade and other receivables)

At December 31, 2019, following the application of IFRS 9 and in accordance with the method detailed in Note 1.5.9.1, the counterparty risk of gross maturity and impairment of past-due loans and receivables carried at amortized cost (excluding trade and other receivables) is analyzed below:

Loans and receivables carried at amortized cost (excluding trade and other receivables) *(in millions of euros)*	Not unpaid/ no overdue more than 60 days	Unpaid/overdue 60 days to 180 days	Overdues of more than 180 days	December 31, 2019 Total
Loans, deposits and guarantees – gross	846.0	43.3	21.0	910.3
Loans, deposits and guarantees – impairment	(159.5)	(2.0)	(2.7)	(164.2)

Loans and receivables carried at amortized cost (excluding trade and other receivables) do not include items relating to amortized cost (-EUR 1.0 million).

Changes in impairment losses and amortized costs are presented in Note 13.1.2, "Loans and receivables at amortized cost".

14.2.2.2 Counterparty risk arising from investment activities

The Group is exposed to counterparty risk on the investment of its cash surplus (cash and cash equivalents) and through its use of derivative financial instruments. Counterparty risk corresponds to the loss which the Group might incur in the event of counterparties failing to meet their contractual obligations. In the case of derivative instruments, that risk corresponds to positive fair value.

The Group invests the majority of its cash surplus in, and negotiates its financial hedging instruments with, leading counterparties. As part of its counterparty risk management policy, the Group has set up management and control procedures that focus on the counterparty's accreditation according to its credit ratings, its financial exposure, as well as objective market factors (Credit Default Swaps, market capitalization), plus an assessment of risk limits.

At December 31, 2019, "Cash and cash equivalents" and derivatives assets were the most significant items subject to counterparty risk. For these items, the breakdown of counterparties by credit rating is as follows:

Counterparty risk arising from investing activities	December 31, 2019				December 31, 2018			
	Total	Investment Grade [a]	Unrated [b]	Non Investment Grade [b]	Total	Investment Grade [a]	Unrated [b]	Non Investment Grade [b]
% of exposure	3,838.9	93%	5%	2%	3,590.4	91%	7%	2%

(a) Counterparties with a minimum Standards & Poor's rating of BBB– or Moody's rating of Baa3.
(b) Most of the two latter types of exposure consisted of consolidated companies with interests or Group companies operating in emerging countries where cash cannot be centralized and is therefore invested locally.

14.3 Liquidity risk

As part of its operating and financial activities, the Group could be exposed to a risk of insufficient liquidity, preventing it from meeting its contractual commitments.

14.3.1 Available cash

The Group's financing policy is based on the following principles:

- diversification of financing sources between the banking and capital markets;
- balanced repayment profile of borrowings.

As of December 31, 2019, the Group's total net cash stood at EUR 3,888.1 million, consisting of cash and cash equivalents of EUR 3,703.0 million, financial assets at fair value through income for EUR 29.8 million, and debt-related derivatives recorded as assets for EUR 155.3 million euros. Almost all surplus cash is invested in short-term bank deposits and interest-bearing accounts.

In addition, at December 31, 2019, the Group specifically had EUR 3,682.3 million in confirmed credit facilities, including EUR 345.9 million already drawn; unused credit facilities therefore amount EUR 3,336.4 million, EUR 287.8 million of which will be maturing in 2020.

89% of total credit lines and 88% of undrawn facilities were centralized. None of these centralized lines contains a default clause linked to financial ratios or minimum credit ratings.

As of December 31, 2019, bank funding accounted for 8.0% of the outstanding borrowings (excluding bank overdrafts and liability current accounts as those elements do not correspond to sustainable financial resources). Funding from capital markets (bond issues for 84.0% and commercial paper for 6.0%) represented 90.0% of the outstanding borrowings (excluding bank overdrafts and liability current accounts).

Available cash, composed of cash and cash equivalents (EUR 3,703.0 million) and financial assets measured at fair value through income (EUR 29.8 million), net of bank overdrafts and liability current accounts (EUR 1,133.6 million), amount to EUR 2,599.2 million at December 31, 2019 *versus* EUR 2,524.5 million at December 31, 2018.

14.3.2 Undiscounted contractual payments

In order to best reflect the current economic circumstances of operations, cash flows related to derivatives recognized as liabilities or assets shown below correspond to net positions. Moreover, the values shown in the table below are positive for a liability and negative for an asset.

Undiscounted contractual payments on outstanding borrowings by maturity and type of lenders are as follows:

At December 31, 2019 *(in millions of euros)*	Total	2020	2021	2022	2023	2024	Beyond 5 years
Bonds issues	9,474.5	465.4	879.1	705.4	452.4	516.2	6,456.0
Commercial paper	678.4	678.4	–	–	–	–	–
Draw downs on credit facilities	345.9	43.7	–	–	274.0	–	28.2
Other bank borrowings	557.2	130.9	33.9	73.0	132.8	64.2	122.4
Other borrowings	221.8	64.3	96.2	5.3	4.8	4.5	46.7
Borrowings	**11,277.8**	**1,382.7**	**1,009.2**	**783.7**	**864.0**	**584.9**	**6,653.3**
Overdrafts and current accounts	1,133.6	1,133.6	–	–	–	–	–
Outstanding borrowings	**12,411.4**	**2,516.3**	**1,009.2**	**783.7**	**864.0**	**584.9**	**6,653.3**
Financial assets measured at fair value through income	(29.8)	(29.8)	–	–	–	–	–
Liquid financial investments	(130.0)	(130.0)	–	–	–	–	–
Other cash and cash equivalents	(3,573.0)	(3,573.0)	–	–	–	–	–
Net debt excluding lease liabilities and excluding amortized cost and impact of derivative financial instruments	**8,678.6**	**(1,216.5)**	**1,009.2**	**783.7**	**864.0**	**584.9**	**6,653.3**

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Outstanding borrowings	**12,451.5**	**2,635.2**	**557.5**	**1,164.1**	**875.5**	**1,000.5**	**6,218.7**
Financial assets relating to financing, financial assets measured at fair value through income and Cash and cash equivalents	(3,453.3)	(3,453.3)	–	–	–	–	–
Net debt excluding amortized cost and impact of derivative financial instruments	**8,998.2**	**(818.1)**	**557.5**	**1,164.1**	**875.5**	**1,000.5**	**6,218.7**

Undiscounted contractual payments on outstanding borrowings break down as follows by maturity:

At December 31, 2019 *(in millions of euros)*	Total	2020	2021	2022	2023	2024	Beyond 5 years
Undiscounted contractual interest payments on outstanding borrowings	2,234.3	256.4	257.1	221.8	191.3	175.2	1,132.5

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Undiscounted contractual interest payments on outstanding borrowings	2,228.2	311.4	255.7	249.3	209.2	178.2	1,024.4

Undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) recognized in liabilities and assets break down as follows by maturity (net amounts):

At December 31, 2019 *(in millions of euros)*	Total	2020	2021	2022	2023	2024	Beyond 5 years
Derivatives (excluding commodities)	(77.8)	8.5	(25.7)	(19.8)	(16.5)	(11.4)	(12.9)

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Derivatives (excluding commodities)	(103.8)	(23.6)	(28.1)	(33.3)	(23.7)	(9.6)	14.5

In order to best reflect the current economic circumstances of operations, cash flows related to derivatives recognized as liabilities or assets shown below correspond to net positions. Moreover, the values shown above are positive for a liability and negative for an asset.

The maturity of the confirmed undrawn credit facilities is as follows:

(in millions of euros)	Total	2020	2021	2022	2023	2024	Beyond 5 years
At December 31, 2019	3,336.4	287.8	75.1	89.5	156.0	2,722.5	5.5

(in millions of euros)	Total	2019	2020	2021	2022	2023	Beyond 5 years
At December 31, 2018	2,290.7	227.0	165.9	1,575.7	80.0	152.0	90.1

Confirmed but unused lines of credit include a EUR 2.5 billion multi-currency club deal (maturing in 2024).

As of December 31, 2019, no counterparty represented more than 6% of confirmed unused credit facilities.

14.4 Equity risk

As of December 31, 2019, equity instruments at fair value held by the Group amounted to EUR 132.2 million (see Note 13.1.1).

A 10% decrease in the value of the listed securities would have a negative pre-tax impact of around EUR 2.2 million on Group shareholders' equity.

The Group's portfolio of listed and unlisted equity investments is managed in accordance with a specific investment policy. Reports on the equity portfolio are submitted to Executive Management on a regular basis.

Note 15 Information related to leases

The following analysis present the main items under leases.

15.1 Rights of use

The following table presents the rights of use by category:

(in millions of euros)	Lands	Buildings	Plant machinery and technical equipment	Vehicles	Others	Total
First-time application of IFRS 16	114.3	701.4	82.9	480.3	4.6	1,383.5
Asset inflows	34.7	75.4	32.3	211.4	4.1	357.9
Impairment loss	–	–	(0.5)	–	–	(0.5)
Amortization	(11.5)	(120.4)	(27.3)	(153.6)	(2.6)	(315.4)
Termination	(7.4)	(10.1)	(0.5)	(4.9)	(0.3)	(23.2)
Scope effects	(0.2)	1.3	–	–	0.1	1.2
Translation effects and other	0.2	1.0	0.3	0.8	–	2.3
At December 31, 2019	**130.1**	**648.6**	**87.2**	**534.0**	**5.9**	**1,405.8**

15.2 Rental expenses benefiting from exemptions under IFRS 16

At December 31, 2019, the following items continue to be presented as rental expenses:

(in millions of euros)	December 31, 2019
Short term leases	102.5
Leases of low value assets	36.7
Expenses on variable leases	6.2
Others	19.2
Total	**164.6**

15.3 Lease liabilities

At December 31, 2019, discounted cashflows on outstanding lease debt by maturity are as follows:

(in millions of euros)	Total	2020	2021	2022	2023	2024	Beyond 2024
Lease obligation	1,474.3	314.9	244.0	204.3	168.1	128.2	414.8

Lease debt related to leases previously classified as finance leases is now included in the lease debt (see Note 1.2.3) and amounts to EUR 31.6 million as at December 31, 2019. Leased assets remain recorded as property, plant and equipment.

(in millions of euros)	December 31, 2019
Repayment of the lease debt	325.1
Interest expense related to lease liabilities	29.3
Rental expenses benefiting from exemptions under IFRS 16	164.6
Cash outflows related to leases	**519.0**

15.4 Information on operating leases – SUEZ lessor

These contracts mainly concern desalination plants or mobile units of SUEZ WTS made available to customers.

Net book value of leased assets by category.

(in millions of euros)	December 31, 2019
Buildings	157.1
Equipments	56.9
Total	**214.0**

Lease income for the year 2019 corresponds to the minimum lease payments and represents EUR 105.2 million.

Future minimum lease payments due, valued at December 31, 2019, can be analyzed as follows:

(in millions of euros)	Total	2020	2021	2022	2023	2024	Beyond 2024
Minimum lease payments receivable	348.9	52.0	48.7	41.7	29.6	25.7	151.2

Note 16 Shareholders' equity

16.1 Share capital

	Number of shares			Value *(in millions of euros)*		
	Total	Treasury shares	Outstanding shares	Share capital	Additional paid-in capital	Treasury shares
At December 31, 2017	**623,362,579**	**5,067,913**	**618,294,666**	**2,493.4**	**5,236.4**	**77.0**
Purchase and disposal of treasury shares		(1,532,963)	1,532,963			(25.2)
Capital decrease following the completion of the implementation of the employee shareholding plan net of expenses (Sharing 2017)	(2,000,000)		(2,000,000)	(8.0)	(21.2)	
At December 31, 2018	**621,362,579**	**3,534,950**	**617,827,629**	**2,485.4**	**5,215.2**	**51.8**
Purchase and disposal of treasury shares		(321,515)	321,515			(4.3)
At December 31, 2019	**621,362,579**	**3,213,435**	**618,149,144**	**2,485.4**	**5,215.2**	**47.5**

16.2 Treasury shares

The tacitly renewable liquidity contract managed by Rothschild & Cie Banque amounts EUR 30.4 million. The aim of this contract is to reduce the volatility of the SUEZ's share price. This contract complies with the professional Ethics Charter drawn up by the *Association française des marchés financiers* (French Financial Markets Association) and approved by the AMF.

As of December 31, 2019, treasury shares amount to 3,213,435 against 3,534,950 as of December 31, 2018 of which 3,175,935 treasury shares acquired under employee share allocation plans and 37,500 under the liquidity contract.

16.3 Other information on premiums and consolidated reserves

Consolidated premiums and reserves, including income for the year (EUR 6,014.7 million as of December 31, 2019), incorporate the SUEZ legal reserve. In accordance with French law, SUEZ's legal reserve represents 10% of the share capital. This reserve may be distributed to shareholders only in the event of the liquidation of the Company.

16.4 Dividend distribution

As for the 2017 and 2018 financial years, it will be proposed to the SUEZ General Shareholders' Meeting called to approve the financial statements for the year ended December 31, 2019 to pay a dividend of EUR 0.65 per share, representing a theoretical total amount of EUR 403.9 million in cash based on the total number of shares at December 31, 2019.

Subject to approval by the Shareholders' Meeting, this dividend will be paid out during the first half of 2020. This dividend is not recognized as liabilities in the financial statements at December 31, 2019 as these financial statements are presented before net income allocation.

16.5 Total gains and losses recognized in equity (Group share)

(in millions of euros)	December 31, 2019	Change	December 31, 2018
Net investment hedges	(158.8)	–	(158.8)
Cash-flow hedges (excluding commodities)	(85.3)	(19.7)	(65.6)
Commodity cash-flow hedges	2.6	9.2	(6.6)
Deferred taxes on items above	23.7	(2.1)	25.8
Translation adjustments	5.7	36.0	(30.3)
Total reclassifiable items	**(212.1)**	**23.4**	**(235.5)**
Of which share of joint ventures in reclassifiable items, net of taxes	*(19.5)*	*9.0*	*(28.5)*
Of which share of associates in reclassifiable items, net of taxes	*(68.0)*	*(7.7)*	*(60.3)*
Actuarial gains and losses	(463.2)	(65.4)	(397.8)
Deferred taxes on actuarial gains and losses	43.8	(22.0)	65.8
Equity instrument	(117.3)	6.3	(123.6)
Deferred taxes on equity instrument	0.1	(0.1)	0.2
Total non-reclassifiable items	**(536.6)**	**(81.2)**	**(455.4)**
Of which share of joint ventures in non-reclassifiable items, net of taxes	–	–	–
Of which share of associates in non-reclassifiable items, net of taxes	*(2.0)*	–	*(2.0)*
Total	**(748.7)**	**(57.8)**	**(690.9)**

The items in the above table are reclassifiable to profit or loss in future periods, with the exception of actuarial gains and losses and related deferred taxes and with the changes in equity instruments recognized in other comprehensive income.

16.6 Undated Deeply Subordinated Notes

In June 2014, SUEZ issued Undated Deeply Subordinated Notes, also denominated hybrids, of EUR 500 million with an initial fixed coupon of 3%. On March 30, 2015, SUEZ issued another Undated Deeply Subordinated Notes for a total amount of EUR 500 million. The new notes bore interest at a fixed rate of 2.5%, revised for the first time seven years after issuance on the basis of the 5-year swap rate, and then every five years.

On April 19, 2017, SUEZ realized an issue of Undated Deeply Subordinated Notes for a total amount of EUR 600 million, with an initial fixed coupon of 2.875%, revised for the first time seven years after the issue on the basis of the swap rate after 5 years, and then again every five years. This issuance was prepared in order to secure funding for the acquisition of GE Water.

On September 12, 2019, SUEZ issued Undated Deeply Subordinated Notes for an amount of EUR 500 million with an initial fixed coupon of 1.625%, revised for the first time seven years after the issue and then every five years. The funds raised were mainly used to the redemption of Undated Deeply Subordinated Notes issued on June 23, 2014 in the amount of EUR 352.1 million. (see Note 2.4)

In accordance with the provisions of IAS 32, these notes or hybrid bonds are considered as equity instrument rather than a debt in the Group's Consolidated Financial Statements as there is no direct or indirect obligation to pay interests (except in the case of a distribution of dividends by the issuer or a redemption of the Notes), nor is there any maturity of the final redemption, but only optional redemption dates.

The Group's outstanding hybrid bonds amount EUR 1,747.9 million as at December 31, 2019.

16.7 Equity management

SUEZ strives to optimize its financial structure on a continuous basis by achieving an optimal balance between net debt and equity as shown in the consolidated statement of financial position. The main aim of the Group in terms of managing its financial structure is to maximize value for shareholders, reduce the cost of capital, and maintain a strong rating while ensuring the desired financial flexibility in order to seize external growth opportunities which will create value. The Group manages its financial structure and makes adjustments in light of changes in economic conditions.

The management goals, policies and procedures have remained identical for several fiscal years.

Note 17 Non-controlling interests

The "non-controlling interests" account amounts to EUR 2,824.8 million at December 31, 2019 compared with EUR 2,600.8 million at December 31, 2018.

They mainly concern:

(in millions of euros)	December 31, 2019	December 31, 2018
Agbar Group	939.9	1,015.0
SWTS	681.2	702.3
SUEZ NWS	601.1	585.3

Details of changes in non-controlling interests are shown in the statement of changes in consolidated shareholder's equity.

At December 31, 2019 the Agbar Group contribution includes EUR 684.8 million coming from the operational company Aguas Andinas listed on Santiago de Chile (Chile) stock exchange. This company is fully consolidated within SUEZ Group on the basis of a 25.1% interest rate through the following companies:

- IAM company, also listed on Santiago de Chile stock exchange, fully consolidates Aguas Andinas on the basis of a 50.1% interest rate;
- the Agbar Group fully consolidates the IAM holding company with a 50.1% interest rate;
- finally, SUEZ fully consolidates Agbar Group with a 100% interest rate.

The following are the summarized Consolidated Financial Statements of the Aguas Andinas Group, extracted from the most recently published (unaudited) data as of September 30, 2019.

Summarized Statement of financial position (at 100%)

(in millions of euros)	September 30, 2019	December 31, 2018
Non-current assets	2,238.0	2,191.0
Current assets	184.6	212.5
of which Cash and cash equivalents	*35.7*	*50.4*
Total assets	**2,422.6**	**2,403.5**
Shareholders' equity, Group share	817.6	805.3
Non-controlling interests	55.0	61.0
Total shareholders' equity	**872.6**	**866.3**
Non-current liabilities	1,324.7	1,231.6
Current liabilities	225.3	305.6
Total shareholders' equity and liabilities	**2,422.6**	**2,403.5**
Closing exchange rate CLP/EUR	793.7	793.0

Summarized Income Statement for the nine first months (at 100%)

(in millions of euros)	September 30, 2019	September 30, 2018
Revenues	526.6	520.8
Operating profit /(loss)	219.8	227.6
Net income – Group share	129.8	135.4
Net income – non-controlling interests	(1.7)	2.7
Net income	**128.1**	**138.1**
Other comprehensive income (OCI)	–	–
Comprehensive income	**128.1**	**138.1**
Average exchange rate CLP/EUR	769.9	750.2

Dividends (100%)

(in millions of euros)	Dividends related to 2018	Dividends related to 2017
Dividends paid by Aguas Andinas	175.5	184.1

Note 18 Provisions

(in millions of euros)	December 31, 2018	Allowances	Reversals (utilizations)	Reversals (surplus provisions)	Scope effects	Impact of unwinding discount adjustments [a]	Translation adjustments	Other	December 31, 2019
Post-employment benefit obligations and other long-term benefits	805.1	24.1	(129.4)	–	(0.2)	19.3	6.0	99.0	823.9
Sector-related risks	60.8	1.2	2.0	(1.2)	(24.0)	–	–	(18.2)	20.6
Warranties	21.9	15.1	(9.8)	–	0.2	–	0.4	(1.9)	25.9
Tax risks, other disputes and claims	79.9	16.8	(21.9)	(1.0)	0.9	–	0.3	(23.3)	51.7
Site restoration	535.4	49.2	(67.0)	–	(3.0)	24.6	5.0	(0.1)	544.1
Restructuring costs	49.1	101.5	(102.7)	(0.4)	10.4	–	0.1	(5.3)	52.7
Other contingencies	451.5	304.6	(290.6)	(7.3)	15.6	3.3	0.9	(21.7)	456.3
Total provisions	**2,003.7**	**512.5**	**(619.4)**	**(9.9)**	**(0.1)**	**47.2**	**12.7**	**28.5**	**1,975.2**
Total current provisions	496.1	397.3	(411.1)	(3.3)	25.3	3.2	2.7	(35.0)	475.2
Total non-current provisions	1,507.6	115.2	(208.3)	(6.6)	(25.4)	44.0	10.0	63.5	1,500.0

(a) The discounting impact on post-employment and other long-term benefits relates to the interest expense calculated on the net amount of pension obligations and the fair value of plan assets, in accordance with IAS 19 revised.

Total provisions decreased by -EUR 28.5 million over the period. This change is mainly due to:

- the net actuarial gain in provisions for post-employment benefit obligations and other long-term benefits for +EUR 90.6 million; this variation is presented in the "Other" column (see details in Note 19.2.2);
- a reversal for utilization of -EUR 87.4 million, due to the defined benefit plans known as "1991" and "1998" – benefiting senior executives of Group entities – and to the closure of the mutual insurance plan in certain French entities to retirees (see Note 19.2.2);
- the reclassification of provision for tax risks, of -EUR 22.6 million, in accordance with IFRIC 23 (see "Other" column);
- finally, the reversal of -EUR 23.3 million in "sector-related risk" earlier established for Aguas Argentinas dispute.

The allowances, reversals and the impact of unwinding discount adjustments presented above and linked to discounting impacts are presented as follows in the consolidated income statement at December 31, 2019:

(in millions of euros)	(Reversals)/net
Income from operating activities	(104.0)
Other financial income and expenses	47.2
Income tax expense	(12.8)
Total	**(69.6)**

The analysis by type of provisions and the principles used to calculate them are explained below.

18.1 Post-employment benefits and other long-term benefits

Changes for this item is presented in Note 19.

18.2 Sector-related risks

This item primarily includes provisions for risks relating to investment on share and to warranties given in connection with divestments that are likely to be called upon.

18.3 Tax risks, other disputes and claims

This item includes provisions for ongoing disputes involving employees or social security agencies (social security contribution relief, etc.), disputes arising in the ordinary course of business (customer claims, accounts payable disputes), tax adjustments and tax disputes.

Due to IFRIC 23's first application – uncertainty relating to tax treatment – provision for risks related to corporate income tax are reclassified under tax liabilities.

18.4 Site restoration

The June 1998 European Directive on waste management introduced a number of obligations regarding the closure and long-term monitoring of landfills. These obligations lay down the rules and conditions incumbent upon the operator (or owner of the site where the operator fails to comply with its obligations) in terms of the design and scale of storage and collection and treatment of liquid (leachates) and gas (biogas) effluents. It also requires provisions for these facilities to be inspected over a 30-year period after closure.

These two types of provisions (rehabilitation and long-term monitoring) are calculated on a case-by-case basis depending on the site concerned. In accordance with the accrual basis of accounting, the provisions are recorded over the period that the site is in operation, *pro rata* to the depletion of landfill capacity (void-space) (matching of income and expenses). Costs to be incurred at the time of a site's closure or during the long-term monitoring period (30 years after a site is shut down within the European Union, 20 years in France starting the application of the ministerial decree of February 15, 2016 with a renewable 5 years monitoring period, and 60 years in Great-Britain) are discounted to present value. An asset is recorded as a counterparty against the provision. It is depreciated in line with the depletion of the landfill capacity or the need for capping, during the period.

The rehabilitation provision calculations (at the time the facility is shut down) depend on whether the capping used is: semi-permeable, semi-permeable with drainage, or impermeable. That choice has a considerable impact on future levels of leachate effluents and therefore on future costs of treating such effluents. Calculating the provision requires an evaluation of the cost of rehabilitating the area to be covered. The provision recorded in the statement of financial position at year-end must cover the costs of rehabilitating the untreated surface area (difference between the fill rate and the percentage of the site's area that has already been rehabilitated). The amount of the provision is reviewed each year based on work completed or still to be carried out.

The calculation of the provision for long-term monitoring depends on the costs linked to the production of leachate and biogas effluents on the one hand, and on the amount of biogas recycled on the other. Biogas recycling represents a *source* of revenue and is deducted from long-term monitoring expenses. The main expense items arising from long-term monitoring obligations relate to:

- construction of infrastructure (biogas recycling facility, installation of leachate treatment facility) and the demolition of installations used while the site was in operation;
- upkeep and maintenance of the protective capping and of the infrastructure (surface water collection);
- control and monitoring of surface water, underground water and leachates;
- replacement and repair of observation wells (piezometer wells);
- leachate treatment costs;
- biogas collection and processing costs (taking into account any revenues from biogas recycling).

The provision for long-term monitoring obligations that should be recorded in the statement of financial position at year-end depends on the fill rate of the facility at the end of the period, the estimated aggregate costs per year and per unit (based on standard or specific costs), the estimated closure date of the site and the discount rate applied to each site (depending on its residual life).

18.5 Other contingencies

"Other contingencies" mainly include provisions for miscellaneous employee-related and environment-related litigations and for various business risks. Those provisions include a provision corresponding to the fair value measurement of onerous contracts for an amount of EUR 75.3 million at December 31, 2019 *versus* EUR 76.8 million at December 31, 2018, following the acquisition of WSN by SUEZ R&R Australia in 2010.

Note 19 Post-employment benefit obligations and other long-term benefits

19.1 Description of the main pension plans and related benefits

Most Group companies grant their employees post-employment benefits (pension plans, retirement bonuses, medical coverage, benefits in kind, etc.) as well as other long-term benefits, such as jubilee and other long-service awards.

19.1.1 Main pension plans

► In France

Employees have defined-contribution retirement plans, such as the basic social security benefits, and supplementary pension schemes. Some employees also have optional retirement plans, some of which are defined-benefit plans through which the employer agrees to pay its employees, or a category of its employees, retirement benefits based on a contractually agreed amount. Thus, the so-called "1991" and "1998" Article 39 defined-benefit plans at SUEZ, SUEZ Groupe and SUEZ Eau France apply to those companies' senior executives. Nevertheless, pursuant the Loi Pacte, a memorandum of understanding for closing these so-called "1991" and "1998" plans was signed on October 24, 2019. The rights of the beneficiaries born in 1962 or before have been cristallised on July 4, 2019.

At December 31, 2019, the Projected Benefit Obligation (PBO) for this senior executives' plan was EUR 76.4 million, *versus* EUR 100.0 million at December 31, 2018. The duration of the actuarial liability for the senior executives' plans is 19 years. It should be noted that these plans are partially funded (40% of gross debt at December 31, 2019).

All employees also receive a retirement termination benefit in the form of a lump-sum payment on the date of the employee's effective departure. Such indemnities correspond to defined-benefit plans.

Outside France, the main retirement plans and related benefits involve the companies in Canada, in the United States and the United Kingdom.

► In the United States and in Canada

In the United States, there are two defined benefit plans: the United Water Resources Inc. Retirement Plan, closed to new employees since January 2010, and the United Water Environmental Services Pension Plan for employees of the unregulated business sector. The latter was closed to non-unionized employees in December 2010. In addition, key executives have a specific retirement plan (SERP). At December 31, 2019, the PBO for the SUEZ Water Inc. defined-benefit pension plans is EUR 484.9 million, *versus* EUR 422.2 million at December 31, 2018. The duration of the actuarial liability for the SUEZ Water Inc. plans is 13 years. It should be noted that these plans are funded up to 72% at December 31, 2019.

In addition, SUEZ Water Inc. commits to support a portion of healthcare costs of retirees. At December 31, 2019, the corresponding actuarial liability amounted to EUR 99.2 million against EUR 88.7 million at 31 December 2018.

The former GE Water entities joined SUEZ by bringing two defined benefit plans in Canada and in the United States: the Pension Plan for Employees of GE Water & Process Technologies Canada and the Ionics, Incorporated Retirement Plan. In addition, key executives have a specific retirement plan (Ionics, Incorporated Supplemental Executive Retirement plan). At December 31, 2019, the PBO for the SUEZ Water Technologies & Solutions defined-benefit pension plans is EUR 155.0 million. The duration of the actuarial liability for the SUEZ Water Technologies & Solutions Water plans is 15 years. These plans are funded up to 81% at December 31, 2019.

Finally, all US subsidiaries offer a 401 (k)-type defined-contribution plan to their employees.

► In the United Kingdom

SUEZ R&R UK has several defined-benefit retirement plans. They are closed to new hires, except for the Sita Final Salary Pension Scheme. SUEZ R&R UK, as part of its expansion, has acquired various entities throughout the United Kingdom. These entities were most often public companies prior to their acquisition, so their staff was affiliated with the Local Government Pension Schemes (LGPS), which SUEZ R&R UK must maintain. At December 31, 2019, the PBO for the SUEZ R&R UK retirement plans is EUR 146.5 million, *versus* EUR 128.7 million at December 31, 2018. The duration of the actuarial liability for the SUEZ R&R UK plans is 18 years. It should be noted that these plans are funded up to 93% at December 31, 2019.

Employees hired after the closing date of these plans are covered by a defined-contribution plan, the Sita Stakeholder Pension Plan.

As mentioned above, defined-benefit plans may be fully or partially funded by contributions to a pension fund (as it is the case in Canada, the United States and the United Kingdom) or to a dedicated fund managed by an insurance company (France). These funds are fed by contributions made by the Company and, in certain cases, by the employees.

19.1.2 Multi-employer pension plans

Employees of some Group companies are affiliated to multi-employer pension plans. This is especially the case in the Netherlands, where most of the Group's entities are in business activities that make it mandatory to join an industry-wide scheme. These plans spread risk so that financing is assured through payroll-based contributions, calculated uniformly across all affiliated companies. In the Netherlands, multi-employer plans are defined benefit plans. However, the Group recognizes them as defined contribution plans in accordance with the provisions of IAS 19.

19.1.3 Other post-employment benefit obligations and long-term benefits

In addition to the supplementary pension schemes mentioned above, most Group companies grant their employees long-service awards – benefits corresponding to bonuses paid to employees while they are active, once they have met certain length of service conditions. Moreover, several Group companies agree to cover a portion of expenses incurred by their employees and/or retirees on the occurrence of specific events (illness, etc.), and in addition to amounts paid under defined contribution plans.

These obligations correspond to defined benefit plans. They are presented in the tables below, in "Other post-employment benefits" and "Other long-term benefits".

19.2 Defined benefit plans

19.2.1 Amounts presented in the statement of financial position and the statement of comprehensive income

In accordance with the provisions of IAS 19, the information presented in the statement of financial position for post-employment and other long-term benefits corresponds to the difference between the present benefit obligation (gross liability) and the fair value of the plan assets. If this difference is positive, a provision is posted (net liability). If the difference is negative, a net asset is posted provided it satisfies the conditions for recognizing a net asset.

Changes in provisions and assets for pensions and related obligations recognized in the statement of financial position can be broken down as follows:

(in millions of euros)	Asset	Liability	Total
Balance at December 31, 2017	**5.9**	**(793.2)**	**(787.3)**
Translation gains and losses	–	(4.3)	(4.3)
Actuarial gains and losses [a]	1.9	5.9	7.8
Changes in scope of consolidation and other	–	(35.3)	(35.3)
Expense of the period [b]	(0.9)	(51.3)	(52.2)
Contributions	0.6	73.1	73.7
Balance at December 31, 2018	**7.5**	**(805.1)**	**(797.7)**
Translation gains and losses	(0.1)	(5.9)	(6.0)
Actuarial gains and losses [a]	0.3	(90.9)	(90.6)
Changes in scope of consolidation and other	–	(0.2)	(0.2)
Expense of the period [b]	(1.0)	27.9	26.9
Contributions	0.9	50.3	51.2
Balance at December 31, 2019	**7.6**	**(823.9)**	**(816.3)**

(a) Actuarial gains and losses on employee benefits.
(b) Including actuarial gains and losses on long-term benefits (particularly long-service awards).

Plan assets and reimbursement rights are presented in the statement of financial position under "Other assets", current and non-current.

The impact on financial year 2019 brings out an income of EUR 26.9 million *versus* an expense of -EUR 52.2 million in 2018. The main components of this income in 2018 are explained in section 19.2.3.

Accumulated actuarial gains and losses recognized in equity amount -EUR 496.9 million at December 31, 2019 against -EUR 406.3 million at December 31, 2018. They are shown below, excluding translation gains and losses which are presented separately in the statement of comprehensive income.

(in millions of euros)	December 31, 2019	December 31, 2018
Opening balance	**(406.3)**	**(415.9)**
Actuarial gains and (losses) generated during the year [a]	(90.6)	7.8
Equity-accounted companies and other	–	1.8
Closing balance	**(496.9)**	**(406.3)**

(a) On employee benefits.

The closing balance of actuarial gains and losses presented above includes actuarial gains and losses recognized in equity-accounted affiliates.

19.2.2 Change in the amount of obligations and plan assets

The table below shows the amount of present benefit obligations and plan assets of the Group SUEZ, the changes to these over the periods concerned, as well as a reconciliation with the amounts recognized in the statement of financial position.

		December 31, 2019				December 31, 2018			
(en millions d'euros)		Pension benefit obligations [a]	Other post-employment benefits [b]	Other long-term benefits [c]	Total	Pension benefit obligations [a]	Other post-employment benefits [b]	Other long-term benefits [c]	Total
Change in Projected Benefit Obligation									
Projected Benefit Obligation at the beginning of the period		**(1,359.1)**	**(242.7)**	**(16.4)**	**(1,618.2)**	**(1,326.3)**	**(249.3)**	**(14.4)**	**(1,590.0)**
Service Cost		(39.2)	(4.5)	(1.4)	(45.1)	(48.7)	(5.8)	(1.4)	(55.9)
Interest cost		(37.3)	(7.1)	(0.3)	(44.7)	(34.1)	(7.2)	(0.2)	(41.5)
Contributions paid		(1.5)	–	–	(1.5)	(1.5)	–	–	(1.5)
Amendments		48.9	36.9	0.5	86.3	(3.3)	0.9	(1.7)	(4.1)
Acquisitions/Disposals of subsidiaries		(0.2)	–	–	(0.2)	(0.5)	–	0.3	(0.2)
Curtailments/Settlements		8.4	(0.4)	0.3	8.3	26.6	2.5	0.5	29.6
Special terminations		–	–	–	–	–	–	–	–
Financial actuarial gains and losses		(159.5)	(23.6)	(1.3)	(184.4)	36.5	2.7	0.3	39.5
Demographic actuarial gains and losses		(3.5)	7.9	0.1	4.5	(10.6)	10.2	1.8	1.4
Benefits paid		52.4	9.4	1.3	63.1	50.0	8.9	1.2	60.1
Other		(23.7)	(3.1)	–	(26.8)	(47.2)	(5.6)	(2.8)	(55.6)
Projected Benefit Obligation at the end of period	**(A)**	**(1,514.3)**	**(227.2)**	**(17.2)**	**(1,758.7)**	**(1,359.1)**	**(242.7)**	**(16.4)**	**(1,618.2)**
Change in fair value of plan assets									
Fair value of plan assets at the beginning of the period		**747.5**	**73.0**	**–**	**820.5**	**728.1**	**74.6**	**–**	**802.7**
Expected return on plan assets		22.1	3.3	–	25.4	19.2	2.8	–	22.0
Contributions received		44.4	5.9	–	50.3	64.2	5.4	–	69.6
Curtailments/Settlements		(2.1)	–	–	(2.1)	(4.3)	–	–	(4.3)
Actuarial gains and losses		78.1	10.0	–	88.1	(26.4)	(4.5)	–	(30.9)
Benefits paid		(51.6)	(9.1)	–	(60.7)	(45.6)	(8.9)	–	(54.5)
Other		19.4	1.5	–	20.9	12.3	3.6	–	15.9
Fair value of plan assets at the end of period	**(B)**	**857.8**	**84.6**	**–**	**942.4**	**747.5**	**73.0**	**–**	**820.5**
Funded status	**(A+B)**	**(656.5)**	**(142.6)**	**(17.2)**	**(816.3)**	**(611.6)**	**(169.7)**	**(16.4)**	**(797.7)**
Net benefit obligation		**(656.5)**	**(142.6)**	**(17.2)**	**(816.3)**	**(611.6)**	**(169.7)**	**(16.4)**	**(797.7)**
Total Liabilities		**(664.1)**	**(142.6)**	**(17.2)**	**(823.9)**	**(619.0)**	**(169.7)**	**(16.4)**	**(805.1)**
Total Assets		**7.6**	**–**	**–**	**7.6**	**7.5**	**–**	**–**	**7.5**

(a) Pensions and retirement bonuses.
(b) Medical coverage, gratuities and other post-employment benefits.
(c) Long-service awards and other long-term benefits.

In 2019, the increase in the amount of the net liability is mainly explained by actuarial losses for EUR 90.6 million. These items are partly compensated by the amendment of the medical coverage of French retirees which led to a -EUR 37.1 million decrease of the net liability and by the closing of the so-called "1991" and "1998" Article 39 defined-benefit plans pursuant the Loi Pacte. As a consequence, the rights of the beneficiaries born in 1962 or before have been cristallised which results in a -EUR 50.3 million decrease of the net liability.

In 2018, the increase of the net liability is explained by the rise of the expense which amounts -EUR 52.2 million and the increase of the contributions paid by the entities of the Group for EUR 69 million.

19.2.3 Components of cost for the period

The net cost recognized in respect of pensions and other defined benefit obligations in 2019 and 2018 breaks down as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Current service cost	(45.1)	(55.9)
Net interest expense on the net defined benefit liability	(19.3)	(19.5)
Actuarial gains or losses	(1.2)	2.1
Past service cost/amendments	86.3	(4.1)
Gains or losses on Pension Plan curtailments, terminations and settlements	6.2	25.3
Total	**26.9**	**(52.2)**
Of which recognized in current operating income	*46.2*	*(32.7)*
Of which recognized in financial income/(loss)	*(19.3)*	*(19.5)*

19.2.4 Funding policy and strategy

When defined benefit plans are funded, the related plan assets are invested through pension funds and/or with insurance companies, depending on the investment practices specific to the country concerned. The investment strategies underlying these defined benefit plans are aimed at striking the right balance between an optimum return on investment and an acceptable level of risk.

These strategies have a twofold objective:

- to maintain sufficient income streams and liquidity to cover pensions and other benefit payments; and
- in a controlled-risk environment, to achieve a long-term return on investment matching the discount rate or, as applicable, at least equal to the future returns required.

When plan assets are invested through pension funds, investment decisions and the allocation of plan assets are the responsibility of the fund manager concerned. For French companies, where plan assets are invested through an insurance company, the fund manager manages the investment portfolio in units of account or euros and guarantees a rate of return on the related assets. Such diversified funds are characterized by active management benchmarked to composite indices, adapted to the long-term horizon of the liabilities and taking into account the government's eurozone obligations and the shares of the largest companies in and outside the eurozone. In the case of euro funds, the insurer's sole obligation is to ensure a fixed minimum return on plan assets.

The funding of these obligations breaks down as follows:

(in millions of euros)	Present benefit obligation	Fair value of plan assets	Cost of unrecognized past service	Limit on defined benefit assets and supplementary provision	Total net obligation
Underfunded plans	(1,141.0)	784.4	–	–	(356.6)
Overfunded plans	(28.7)	36.1	–	–	7.4
Unfunded plans	(448.5)	–	–	–	(448.5)
Total December 31, 2018	**(1,618.2)**	**820.5**	**–**	**–**	**(797.7)**
Underfunded plans	(1,277.1)	896.3	–	–	(380.8)
Overfunded plans	(38.5)	46.1	–	–	7.6
Unfunded plans	(443.1)	–	–	–	(443.1)
Total December 31, 2019	**(1,758.7)**	**942.4**	**–**	**–**	**(816.3)**

The allocation of plan assets by main asset category breaks down as follows:

	2019	2018
Securities	14%	32%
Bonds	54%	39%
Real Estate	6%	3%
Other (including money market securities)	26%	26%
Total	**100%**	**100%**

The allocation of plan assets by geographical area of investment is as follows:

	Europe	North America	Asia Oceania	Other
Securities	6%	26%	0%	0%
Bonds	79%	53%	86%	0%
Real Estate	2%	12%	0%	0%
Other (including money market securities)	13%	9%	14%	100%
Total	**100%**	**100%**	**100%**	**100%**

19.2.5 Actuarial assumptions

Actuarial assumptions are determined individually per country and company, in association with independent actuaries.

The weighted rates are presented below:

	Pensions		Other post-employment benefits		Long-term benefits		Total benefit obligation	
	2019	2018	2019	2018	2019	2018	2019	2018
Discount rate	1.8%	2.8%	2.5%	3.2%	0.8%	2.1%	1.9%	2.9%
Estimated future increase in salaries	2.5%	2.7%	3.1%	2.4%	1.5%	2.2%	2.6%	2.7%
Inflation Rate	2.1%	2.1%	2.3%	2.2%	1.7%	1.9%	2.1%	2.1%
Average remaining working lives of participating employees	16 years	13 years	14 years	14 years	8 years	14 years	15 years	13 years

Discount and salary increase rates are shown including inflation.

19.2.5.1 Discount rate and inflation

The discount rate used is determined by reference to the yield, at the measurement date, of AA corporate bonds with a maturity corresponding to the anticipated term of the obligation.

As for December 31, 2018, the 2019 rates were determined for each currency area (euro, US dollar and pound sterling) from data on AA bond yields (according to Bloomberg and iBoxx) extrapolated to long-term maturities based on the performance of government bonds. A discount rate curve has been used per currency area and has been applied to debt and to the components of the current cost (Service Cost and Net Interest).

According to estimates made by the Group, a change of plus or minus 1% of the discount rate would result in a change in actuarial liabilities of approximately 15%.

Inflation rates were determined for each currency zone. A change in the inflation rate of roughly 1% would result in a change in the actuarial liability of 7%.

19.2.6 Geographical breakdown of obligations

In 2019, the geographical breakdown of the main obligations and the related actuarial assumptions (including inflation) are as follows:

	Euro Zone		United Kingdom		United States		Rest of the World	
(en millions d'euros)	Pensions	Other benefit obligations	Pensions	Other benefit obligations	Pensions	Other benefit obligations	Pensions	Other benefit obligations
Funded status [a]	(414.9)	(73.6)	(16.0)	0.0	(114.3)	(17.7)	(111.3)	(68.5)
Discount rate	0.4%	0.4%	1.9%	0.0%	3.1%	3.2%	2.4%	1.8%
Estimated future increase in salaries	1.9%	1.3%	1.0%	0.0%	3.4%	2.5%	3.1%	3.1%
Inflation Rate	1.7%	1.8%	3.1%	0.0%	2.5%	2.5%	1.7%	1.4%
Average remaining working lives of participating employees	15 years	14 years	19 years	N/A	15 years	15 years	16 years	13 years

(a) Funded status corresponds to the difference between the present benefit obligation and the fair value of the plan assets.

Concerning "Rest of the world" category, the funded status relating to pension mainly concerns Sweden and Chile, while the funded status relating to the other benefit obligations stems largely from Morocco.

19.2.7 Payments due in 2020

The Group expects to contribute to defined benefit plans in 2020 and to pay benefits for a total approximate amount of EUR 65.0 million.

19.3 Defined contribution plans

In 2019, the SUEZ Group recorded a EUR 59.1 million expense in respect of contributions to the Group defined contribution plans. These contributions are recorded under "Personnel costs" in the income statement.

Note 20 Share-based payments or cash-based payments

Expenses recognized in respect of share-based payments or cash-based payments are as follows:

(in millions of euros)	Note	(Expense) for the period 2019	2018
Performance share and units plans	20.1	(3.7)	(0.9)
Employees share issues [a]	20.2	(16.5)	(2.4)
Long-term incentive plan [b]	20.3	5.3	(3.7)
Total		**(14.9)**	**(6.9)**

(a) Impact of Share Appreciation Rights is presented after hedging by warrants (subject to IFRS 9). Before hedging by warrants, the 2019 impact related to capital increases reserved for employees amounts to -EUR 16.2 million. In 2018 the impact was an expense of -EUR 0.6 million.
(b) The positive impact in 2019 is explained by the reversal of provision of EUR 9.7 million following 2016 plan delivery. The expenses related to the amount paid to the beneficiaries are booked in personnel costs (short term benefits).

The last stock option plan expired on December 15, 2018 and the last global free share allocation plan expired in January 2017.

20.1 Performance share and unit plans

20.1.1 Arrangements and grants

At its meeting on October 29, 2019, the Board of Directors, granted a share-based performance unit plan to certain of its employees in France and abroad.

At the end of the vesting period and subject to the conditions of the plan and the level of achievement of the performance conditions, the beneficiaries of the "Performance Units" plan will receive cash. Indeed, each vested Unit entitles the beneficiaries to receive in cash a gross amount equal to the average closing price of the SUEZ share over the 10 trading days preceding the vesting date.

The payment of remuneration is subject to the presence of the beneficiary in the company between the grant date and the vesting date.

The table below summarizes the main features of the deferred compensation plan:

Specifications		Performance Units
Number of beneficiaries	*Beneficiaries A*	500
	Beneficiaries B	1,250
	Corporate Officer	1
Number of instruments granted	*Beneficiaries A*	1,201,000
	Beneficiaries B	646,000
	Corporate Officer	38,750
Date of allocation		10/29/2019
Date of acquisition		10/31/2022

18

20.1.2 Internal performance conditions

This plan is subject to internal performance conditions. If the performance targets are not fully met, the number of shares granted to employees is reduced in accordance with the plan rules. Any such change in the number of shares leads to a reduction in the total expense of the plan, in accordance with IFRS 2. Performance conditions are reviewed at each year-end.

This plan granted in October 29, 2019 concerns three lists of beneficiaries: Beneficiaries A, Beneficiaries B and Corporate Officer. The performance conditions are equal for all beneficiaries and are as follows:

- a performance condition linked to the recurring net result per share of SUEZ Group as December 31, 2021 and applies to a third of remuneration that may be paid;
- a performance condition linked to the recurring free cash flow of SUEZ Group as December 31, 2021 and applies to a third of remuneration that may be paid;
- a performance condition linked to the evolution of SUEZ's Total Shareholder Return over the period from January 1, 2019 to December 31, 2021 compared to the evolution of the Total Shareholder Return of the Euro Stoxx Utilities Index over the same period applies to a third of the total remuneration that may be paid.

Finally, for all beneficiaries, the amount of the payment as resulting from the application of the performance conditions may be increased or decreased by 10% depending on the level of the gender parity index in the management (GPI) at December 31, 2021.

According to the social indicator framework deployed within the SUEZ Group as part of the social reporting process, the SUEZ GPI corresponds to the following ratio: number of female executives/total number of executives.

20.1.3 Retained assumptions

The fair value of the plan is estimated on the basis of the share price at the grant date, taking into account the following assumptions:

Assumptions	Performance units
Date of allocation	10/29/2019
Underlying share price on the allocation date	EUR 13.55
SUEZ volatility	16.68%
Euro volatility STOXX Utilities	12.46%
Anticipated dividends from SUEZ	EUR 0.65
Anticipated dividends from Euro Stoxx Utilities	EUR 13.50
Risk-free rate	1 year: -0.66% 2 years: -0.68% 3 years: -0.68% 4 years: -0.64%
Employee turnover rate	5%/year
Probability of meeting internal performance conditions	100%

The external performance condition, which determines the fair value of the plan, was valued using the Black & Scholes method.

The fair value of the performance units granted in this way results in a total expense of EUR 15.2 million over the term of the plans.

20.1.4 Accounting expenses

	Number of shares granted	Outstanding number of shares at December 31, 2019	Weighted average fair value	(Expense) for the period	
				2019	2018
July 2018 – Performance shares plan	719,785	629,253	EUR 6.2	(1.2)	(0.5)
July 2018 – Performance units plan	517,855	485,221	EUR 9.5	(1.3)	(0.4)
October 2019 – Performance units plan	1,885,750	1,870,035	EUR 9.3	(1.2)	–
Total	**3,123,390**	**2,984,509**		**(3.7)**	**(0.9)**

The cost of the plans, including social security contributions, is spread over the vesting period with a corresponding charge to shareholders' equity for Performance Shares plan and to social debt for Performance units plans.

20.2 Employee share issues

The expense recorded during the period on current plans is as follows:

(in millions of euros)			(Expense) for the period	
			2019	2018
SUEZ Sharing 2019 plan	Discount and employer contribution in France	December 2019	(15.8)	–
SUEZ Sharing 2017 plan	Matching shares – International	December 2017	(0.3)	(0.3)
SUEZ Sharing 2017 plan	*Share Appreciation Rights*	December 2017	(0.2)	(1.2)
SUEZ Sharing 2014 plan	Matching shares – International	July 2014	(0.1)	(0.2)
SUEZ Sharing 2014 plan	*Share Appreciation Rights*	July 2014	(0.1)	(0.6)
Total [a]			**(16.5)**	**(2.4)**

(a) Impact of Share Appreciation Rights is presented after hedging by warrants (subject to IFRS 9). Before hedging by warrants, the expense of the year 2019 related to employee share issue amounts to -EUR 16.2 million. In 2018 the impact was -EUR 0.6 million.

The measures relating to the Sharing 2017 and 2014 Plans are described in detail in SUEZ's previous Reference Documents.

20.2.1 Sharing 2019 plan

In 2019, SUEZ launched its fourth global employee shareholding plan, called Sharing. This employee share issue program is part of the policy to increase employee shareholding and strengthen the existing relationship between SUEZ and its employees by offering them the possibility of being more closely associated with the Group's growth and performance. Two formulas were offered:

- a "Classic" formula, which includes a discount and employer contribution and in which the subscriber is exposed to movements in the share price. In France, employees benefited from matching shares as part of the company savings plan. Outside France, matching shares took the form of a bonus share allocation. In the United Kingdom, a Share Incentive plan (SIP) was implemented alternatively. It allowed employees to subscribe at the lower share price measured on November 7, 2019 or January 15, 2020;
- a "Multiple" formula, which allows employees to benefit from a leverage effect to supplement their personal contribution as well as a discounted subscription price. A swap agreement with the bank that structures the plan allows employees to benefit from a guarantee on their personal contribution and a guaranteed minimum return. In some countries (especially in the United States), the Multiple formula was adapted to local laws and Share Appreciation Rights were granted as an alternative.

The set-up of Sharing 2019 has been structured in 2019 while the capital increase itself was achieved on January 16, 2020 and has resulted in a creation of 9.97 million of shares of 4 euros nominal value.

20.2.1.1 Accounting impact of the employee share issue and of the matching shares in France

The subscription price for the plan was defined as the SUEZ average opening share price over the 20 trading days preceding the date of the CEO's decision to start the subscription/rejection period, less 20%, which was EUR 10.52.

Pursuant to IFRS 2, an expense is recognized in the books of SUEZ against equity. With respect to discount, the cost of the Classic and Multiple plans corresponds to the difference between the fair value of the subscribed share and the subscription price. The fair value takes into account the 5-year lock-in period required by French law, as well as, for the Multiple formula, the opportunity gain implicitly borne by SUEZ in allowing its employees to benefit from more advantageous pricing than they could obtain as ordinary private investors. The fair value of the matching shares under the employer contribution in France has been calculated using the method described in Note 1.5.11. In this case, the shares are delivered immediately with no vesting period, but are subject to a 5-year lock-in period.

The following assumptions were used:

- 5-year risk-free interest rate: 0.00%;
- cost of securities lending: 0.50%;
- volatility spread: 5.00%.

Therefore, an expense of -EUR 15.8 million has been booked in 2019 since the benefit granted by the Group to subscribing employees was already known at December 31, 2019 (value of the benefit per share and number of shares subscribed).

		Sharing Classic	Sharing Multiple	Matching shares in France	Total
Amount subscribed *(in millions of euros)*	–	14.8	98.8	–	113.6
Number of shares subscribed *(in millions)*	(a)	1.4	8.3	0.2	9.9
Gross value of the employee benefit *(euros/share)*	b1	2.6	1.3	13.7	–
Lock-in cost for the employee *(euros/share)*	b2	(3.7)	(0.3)	(3.7)	–
Measure of opportunity gain *(euros/share)*	b3	0.7	0.7	–	–
Total benefit granted to employees *(euros/share)*[(a)]	(b) = b1+b2+b3	–	1.6	10.0	–
Book expense	**– (a) x (b)**	**–**	**(13.7)**	**(2.1)**	**(15.8)**

(a) When the benefit granted to the personnel is negative, it is brought to 0.

The valuation of the recognized expense depends upon, among other factors, the estimation of the financing rate for employees and the valuation of the opportunity gain. A +/– 0.5% change in these rates would have the following impact on the recognized expense:

	Sharing Multiple	Matching shares in France	Total
Sensitivity *(change in expense in millions of euros)*			
Decrease in financing rate for employee –0.5%	–	(0.1)	(0.1)
Increase in opportunity gain +0.5%	(0.6)	–	(0.6)

► **Accounting impact of the share incentive plan (SIP) in the United Kingdom**

According to the SIP rules, the Chief Executive Officer of SUEZ set the subscription price at EUR 13.52 on January 15, 2020. Since the benefit granted by the Group to subscribing employees was not known at December 31, 2019 (value of the benefit per share), no expense was recognized on the SIP plan in 2019.

The number of shares reserved on December 31, 2019 as part of the SIP plan is 20 thousand.

► **Accounting impact of matching overseas**

The matching shares overseas (excluding France and the United Kingdom) will take the form of a bonus share allocation. Vesting is subject to five years' service within the Group after the grant. In accordance with IFRS 2, expense will be amortized on the vesting period. Since the benefit granted by the Group to subscribing employees was not known at December 31, 2019, no expense was recognized on matching shares overseas.

► **Accounting impact of Share Appreciation Rights (SAR)**

In some countries (especially in the United States), the "Multiple" plan takes the form of an alternative mechanism called "Share Appreciation Rights" (SARs). Employees benefit from a multiplier on the performance of SUEZ shares that is paid in cash at the end of a 5-year period.

The accounting impact of the cash- settled Share Appreciation Rights (SARs) involves recognizing an expense against an employee payable over the vesting period of the SARs. The resulting debt to employees is covered by warrants issued by the bank in charge of structuring the operation. The SARs are covered by warrants that offset the expenses incurred by the SARs at the end of the five-year plan.

In accordance with IFRS 2, expense will be amortized on the vesting period.

However, since the benefit granted by the Group to subscribing employees was not known at December 31, 2019, no expense was recognized on SARs in 2019.

20.3 Long-term incentive plan

There are three SUEZ plans in progress as of December 31, 2019. It is the two long-term incentive plans linked to the integration and performance of the Water Technologies & Solutions (WTS) business unit and the long-term incentive set up by the Board of Directors on February 28, 2017 and concerns all employees of the Group.

Specifications related to those plans are described in detail in SUEZ's previous Reference Documents.

During the 2019 financial year, all outstanding long-term compensation plans generated a net profit of EUR 5.3 million (also considering the provisioning of social security contributions). This profit includes the reversal of the provision of EUR 9.7 million following 2016 plan delivery in 2019.

Note 21 Related-party transactions

Material transactions between the Group and its related parties are presented in accordance with IAS 24. They concern transactions with:

- associated companies and joint ventures of the SUEZ Group;
- ENGIE, which consolidates SUEZ using the equity method;
- companies related to ENGIE.

Compensation for key executives (Executive Committee) is presented in Note 22.

21.1 Transactions with ENGIE and related entities

(in millions of euros)	December 31, 2019	December 31, 2018
Transactions with ENGIE		
Purchases/sales of goods and services	8.9	0.5
Non financial payables	0.3	7.1
Non financial receivables	0.1	0.2
Receivables carried at amortized cost [a]	–	14.0
Transactions with companies linked to ENGIE		
Purchases/sales of goods and services	12.6	12.8
Financial incomes	–	0.5
Non financial receivables	8.8	23.7
Non financial payables	0.8	0.4
Financial payables	0.8	0.8
Borrowings excluding financial instruments	0.8	0.7
Commodity derivatives (Liabilities)	1.3	(0.7)

(a) At the end of December 2019, the balance of this receivable is at 0, following the final settlement of the dispute between SUEZ and Argentina over Aguas Argentinas. See Notes 2.2 and 23.

21.2 Transactions with joint operations, joint ventures and associates

At December 31, 2019, these transactions correspond mainly to loans granted to joint ventures and associates, for which the balance in the statement of financial position amounts to EUR 123.4 million, the main lines of which:

- EUR 37.3 million with joint ventures in water business in Europe;
- EUR 38.5 million with associates in charge of the commissioning and operation of incinerators in the United Kingdom;
- furthermore, EUR 13.7 million with a joint venture in Kuwait for the maintenance contract of a water treatment plant.

Note 22 Executive compensation

The Group's Executive Committee, previously Management Committee, is composed of ten members at December 31, 2019. At December 31, 2018, there were eleven members in the Management Committee.

Their compensation breaks down as follows:

(in millions of euros)	December 31, 2019	December 31, 2018
Short-term benefits	9.3	9.3
Post-employment benefits [a]	0.7	1.6
Long-term incentive plans [b]	0.2	2.3
Total	**10.2**	**13.2**

(a) Post-employment benefits relate to the SUEZ Group plans only.
(b) Long-term incentive plans: included performance share plans.

Note 23 Legal and arbitration proceedings

Litigation and arbitration

In the normal course of its business, the Group is involved in a certain number of litigation and arbitration with third parties or with the tax administrations of certain countries. Provisions are recorded for such litigation and arbitration when a legal, contractual or constructive obligation exists at the closing date with respect to a third party; it is probable that an outflow of resources without economic benefits will be necessary to settle the obligation; and the amount of the said outflow of resources can be estimated in a sufficiently reliable manner. Provisions recorded in respect of the above amounted to EUR 51.7 million as of December 31, 2019.

There is no other governmental, judicial, or arbitration proceedings of which the Group is aware of, that is suspended or with which it is threatened, likely to have or that has already had, in the past six months, a material impact on the Group's financial position or profitability.

Litigation in Argentina

In Argentina, tariffs applicable to public-service contracts were frozen by the Public Emergency and Exchange Regime Reform Law (Emergency Act) in January 2002, preventing the application of contractual price indexation that would apply in the event of a depreciation of the Argentine peso against the US dollar.

In 2003, SUEZ – now ENGIE – and its co-shareholders in the water concessions for Buenos Aires and Santa Fé filed arbitration proceedings against the Argentinean government, in its capacity as grantor, to enforce the concession agreements' contractual clauses with the International Center for the Settlement of Investment Disputes (ICSID), in accordance with the bilateral Franco-Argentinean investment protection treaties.

These ICSID arbitration proceedings aim at obtaining indemnities to compensate for the loss of value of the investments made since the start of the concession due to the measures adopted by the Argentinean government following the adoption of the abovementioned Emergency Act. The ICSID acknowledged its jurisdiction to rule on the two cases in 2006. At the same time as the ICSID proceedings, the concession-holders Aguas Argentinas and Aguas Provinciales de Santa Fé were forced to file proceedings to cancel their concession agreement with local governments.

However, since the financial situation of the concession-holding companies had deteriorated since the Emergency Act, Aguas Provinciales de Santa Fé announced that it was filing for judicial liquidation at its Shareholders' Meeting on January 13, 2006.

At the same time, Aguas Argentinas applied to file a Concurso Preventivo (similar to a French bankruptcy procedure). As part of these bankruptcy proceedings, a settlement proposal involving the novation of admissible Aguas Argentinas liabilities was approved by creditors and ratified by the bankruptcy court on April 11, 2008. The liabilities are in the process of being settled. The proposal provides for an initial payment of 20% (about USD 40 million) upon ratification and a second payment of 20% in the event of compensation by the Argentinean government. As controlling shareholders, ENGIE and Agbar decided to financially support Aguas Argentinas in making this first payment, upon ratification, and paid USD 6.1 million and USD 3.8 million respectively.

In two decisions dated July 30, 2010, the ICSID recognized the Argentine government's liability in canceling the Buenos Aires and Santa Fé water and wastewater treatment concession contracts. In addition, in June 2011 the ICSID appointed an expert to provide a definitive assessment of the compensation payable for the commercial harm. The reports on the Buenos Aires and Santa Fé concessions were presented by the expert to the ICSID respectively in September 2013 and in April 2014.

Regarding the Buenos Aires concession, ICSID rendered its decision on April 9, 2015 ordering the Argentine Republic to pay Aguas Argentinas shareholders USD 405 million in damages (including USD 367 million to SUEZ and its subsidiaries). In early August 2015, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. The appeal was rejected on May 2017 making ICSID's decision final.

In April 2019, the Argentine government and the shareholders of Aguas Argentinas entered into and implemented a settlement agreement pursuant to the ICSID decision, for which SUEZ and its subsidiaries received a cash amount of EUR 224.1 million.

Concerning the Santa Fé concession, in a December 4, 2015 decision, ICSID ordered the Argentine Republic to pay USD 225 million to the shareholders of Aguas Provinciales de Santa Fé as a result of the termination of the concession agreement, and the entire amount was to go to SUEZ and its subsidiaries. In September 2016, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. This recourse was rejected on December 2018 making this decision irrevocable.

Note 24 Subsequent events

In 2019, SUEZ launched its fourth global shareholder employee plan called Sharing to grow the Group's employee shareholding (see Note 20.2.1).

The setup of Sharing 2019 has been structured in 2019 while the capital increase itself was achieved on January 16, 2020 and has resulted in an issuance of 9.97 million of shares with a EUR 4 nominal value.

Subsequent to this operation, the share capital of SUEZ totaled EUR 2,525,330,516 divided into 631,332,629 shares.

There is no other subsequent event.

Note 25 List of the main consolidated companies at December 31, 2019 and 2018

Entities presented in the list below cover 80% of the following indicators: Revenues, EBITDA, Net Debt and capital employed.

		% interest		% control		Consolidation methods[a]	
Names	Headquarters address	Dec. 2019	Dec. 2018	Dec. 2019	Dec. 2018	Dec. 2019	Dec. 2018
SUEZ	Tour CB21, 16 Place de l'Iris, 92040 Paris–La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
WATER EUROPE							
SUEZ Eau France	Tour CB21, 16 Place de l'Iris, 92040 Paris–La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
SUEZ Spain	Edificio D38 – Passeig Zona Franca 08038 Barcelona – Spain	100.0	100.0	100.0	100.0	FC	FC
Aguas Andinas	Avenida Presidente Balmaceda 1398, Piso 4, Santiago – Chile	25.1	25.1	50.1	50.1	FC	FC
RECYCLING AND RECOVERY EUROPE							
SUEZ Recycling and Recovery Holdings UK Ltd	Grenfell road, Maidenhead, Berkshire SL6 1ES – United Kingdom	100.0	100.0	100.0	100.0	FC	FC
SUEZ Recycling & Recovery Deutschland GmbH	Industriestrasse 161 D–50999 Köln – Deutschland	100.0	100.0	100.0	100.0	FC	FC

(a) FC: Full consolidation. EM: Equity method of consolidation.

Names	Headquarters address	% interest Dec. 2019	% interest Dec. 2018	% control Dec. 2019	% control Dec. 2018	Consolidation methods[a] Dec. 2019	Consolidation methods[a] Dec. 2018
RECYCLING AND RECOVERY EUROPE							
SUEZ Nederland Holding B.V.	Meester E.N. van Kleffensstraat 10, 6842 CV Arnhem – Netherlands	100.0	100.0	100.0	100.0	FC	FC
SUEZ RV France	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
SUEZ R&R Belgium N.V.	Avenue Charles-Quint 584 7 1082 Berchem, Sainte-Agathe – Belgium	100.0	100.0	100.0	100.0	FC	FC
SOCALUX	Lamesch SA ZI Wolser Nord BP 75 L3201 Bettembourg, Luxembourg	100.0	100.0	100.0	100.0	FC	FC
SUEZ Recycling AB	Kungsgardsleden, 26271 Angelholm – Sweden	100.0	100.0	100.0	100.0	FC	FC
INTERNATIONAL							
SUEZ Recycling & Recovery Pty Ltd	Level 3, 3 Rider Boulevard 2138 Rhodes, NSW – Australia	100.0	100.0	100.0	100.0	FC	FC
ACEA Spa	p.le Ostiense, 2 – 00154 Roma – Italy	23.3	23.3	23.3	23.3	EM	EM
AQUASURE HOLDING Ltd	492 St Kilda Road – level 7 Melbourne, VIC 3004 – Australia	11.7	11.7	11.7	11.7	EM	EM
SUEZ Water Inc. Utility	461 From Road Suite 400, Paramus 07652 New Jersey United States of America	80.0	100.0	80.0	100.0	FC	FC
SUEZ Water Inc. ES	461 From Road Suite 400, Paramus 07652 New Jersey United States of America	100.0	100.0	100.0	100.0	FC	FC
SUEZ North America Inc	461 From Road Suite 400, Paramus 07652 New Jersey United States of America	100.0	100.0	100.0	100.0	FC	FC
SUEZ Water Advanced Solutions, LLC	1230 Peachtree Street NE, Suite 1100, Promenade II Building, Atlanta, GA 30309 – United States of America	100.0	100.0	100.0	100.0	FC	FC
The Macao Water Supply Company Limited	718 avenida do Conselheiro, Macao – China	49.3	49.3	58.0	58.0	FC	FC
SUEZ NWS R&R (Hong kong) Limited	Room 702, 7/F, Lee Garden Two, 2 8 Yun Ping Road, Causeway Bay, Hong Kong	58.0	58.0	58.0	58.0	FC	FC
SUEZ Polska sp. z o.o.	Zawodzie 5, 02-981 Warszawa – Poland	100.0	100.0	100.0	100.0	FC	FC
LYDEC	48, Boulevard Mohamed Diouri, Casablanca – Morocco	51.0	51.0	51.0	51.0	FC	FC
SUEZ International	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
WATER TECHNOLOGIES & SOLUTIONS – WTS							
SUEZ Treatment Solutions Inc	461 From Rd Ste 400 Paramus, NJ, 07652-3526 – United States of America	70.0	70.0	70.0	70.0	FC	FC
SUEZ WTS Usa, Inc	4636 Somerton Road, Bldg 8 PA 19053 Trevose – United States of America	70.0	70.0	70.0	70.0	FC	IG

(a) FC: Full consolidation. EM: Equity method of consolidation.

Names	Headquarters address	% interest Dec. 2019	% interest Dec. 2018	% control Dec. 2019	% control Dec. 2018	Consolidation methods[a] Dec. 2019	Consolidation methods[a] Dec. 2018
WATER TECHNOLOGIES & SOLUTIONS – WTS							
SUEZ WTS Services Usa, Inc	4545 Patent Road VA 23502 Norfolk – United States of America	70.0	70.0	70.0	70.0	FC	IG
SUEZ Water Technologies & Solutions	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	70.0	70.0	70.0	70.0	FC	FC
OTHER							
SUEZ Groupe	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
Safège	15, rue du Port, 92022 Nanterre – France	100.0	100.0	100.0	100.0	FC	FC

(a) FC: Full consolidation. EM: Equity method of consolidation.

Note 26 Fees of the Statutory Auditors and members of their networks

The accounting firms Ernst & Young and Mazars act as Statutory Auditors for the SUEZ Group.

(in thousands of euros)	Ernst & Young 2019 Ernst & Young and Others Amount	%	Network Amount	%	Ernst & Young 2018 Ernst & Young and Others Amount	%	Network Amount	%	Mazars 2019 Mazars SA Amount	%	Network Amount	%	Mazars 2018 Mazars SA Amount	%	Network Amount	%
Audit and limited review on the statutory and Consolidated Financial Statements																
SUEZ SA	983	21%	–	–	743	19%	–	–	659	14%	–	–	681	15%	–	–
Fully consolidated subsidiaries and joint operations	3,017	63%	4,798	89%	2,573	68%	4,720	84%	3,498	77%	2,581	88%	3,669	79%	2,501	94%
Other services																
SUEZ SA	637	14%	–	–	118	3%	–	–	385	8%	84	3%	69	1%	90	3%
Fully consolidated subsidiaries and joint operations	116	2%	593	11%	381	10%	893	16%	48	1%	249	9%	227	5%	88	3%
Total	**4,753**	**100%**	**5,391**	**100%**	**3,815**	**100%**	**5,613**	**100%**	**4,590**	**100%**	**2,914**	**100%**	**4,646**	**100%**	**2,679**	**100%**

Other services than account certification providing during the year to SUEZ SA and its controlled entities include primarily verifications of CSR information.

18.2 Statutory Auditors' report on the consolidated financial statements

This is a translation into English of the Statutory Auditors' Report on the Consolidated Financial Statements of the Company issued in French and it is provided solely for the convenience of English-speaking users. This Statutory Auditors' Report includes information required by European Regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the information concerning the Group presented in the Management Report. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Year ended December 31, 2019

To the Annual General meeting of SUEZ,

Opinion

In compliance with the engagement entrusted to us by your Annual General meetings, we have audited the accompanying consolidated financial statements of SUEZ for the year ended December 31, 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2019 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2019 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for statutory auditors.

Emphasis of Matter

We draw attention to the following matter described in Notes 1.2.3 and 1.2.4 to the consolidated financial statements relating to the impacts of the first-time application from January 1, 2019 of IFRS 16 "Leases" and IFRIC23 "Uncertainty over Income Tax Treatments" standards. Our opinion is not modified in respect of this matter.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Valuation of goodwill

RISK IDENTIFIED

As at December 31, 2019, the amount of goodwill net value is M€ 5,322.1.

As indicated in Note 1.5.4.1 to the consolidated financial statements, goodwill is not depreciated but goodwill impairment loss is tested every year, or more frequently when an indication of impairment loss is identified.

The methods used to carry out these impairment tests are described in Notes 1.5.6 and 9.3 to the consolidated financial statements. Impairment tests require the use of assumptions and estimates whose completion is by nature uncertain, including:

- the projections of the operating cash flows;
- the terminal value determined by applying a long-term growth rate to after-tax cash flows;
- the discount rates based on the characteristics of the concerned operational entities.

The recoverable amount of goodwill is sensible to the fluctuation of these assumptions and estimates. Consequently, we considered the valuation of goodwill as a key audit matter.

OUR RESPONSE

In this context, we performed the verification of the methods applied to carry out these impairment tests and we focused on the significant cash-generating units (CGU) indicated in Note 9.2 to the consolidated financial statements.

We reconciled the data used for impairment tests with the Medium-Term Plan (MTP) approved by your Board of Directors. We considered the following underlying assumptions:

- the projections of operating cash flows prepared over the duration of the MTP and related to operating conditions provided by the Executive Committee, specifically the contracts duration carried by the entities of the CGU in question, changes in pricing regulations and future market outlooks;
- the terminal value for the period over the MTP, calculated by applying a long-term growth rate, comprised between 1,9% and 2,7%, depending on the activity, to normalized "free cash flow" in the final year of the projections.

We involved in our audit team experts in valuation and performed the verification of discount rates, long-term growth rates and the discount cash flow method to calculate the projections of operating cash flows. Furthermore, we obtained and considered the sensitivity of the analyses conducted by your Group's management, whose results are indicated in Note 9.4 to the consolidated financial statements.

Valuation of revenues from water distribution, generated but not metered in the Water Europe operating segment (called "*en compteur*")

RISK IDENTIFIED

As disclosed in Note 1.4.1.7 to the consolidated financial statements, revenues generated from customers whose consumption is metered during the accounting period are estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. Your Group has developed measuring and modelling tools that enable to estimate revenues.

We considered measurement of revenues from water distribution, generated but not metered as a key audit matter given the inherent uncertainty relating to the process of evaluating volumes of water distributed but not metered at the reporting date and the evaluation of the corresponding sale price.

OUR RESPONSE

In the context of our audit:

- we got acquainted with the control environment along with the invoicing chain and processes allowing the reliability of estimates on water metered;
- we tested with team members having particular competence in information systems the key automated controls used to estimate water metered, and we audited the functioning of the computing algorithm;
- we analyzed the reconciliation between estimated volumes made by SUEZ of water consumed and volumes of water distributed over the period;
- we verified the calculation of the price charged for these volumes in relation to contract terms;
- we analyzed the reconciliation made by your Group between estimated volumes and invoiced volumes retrospectively.

Construction contracts accounting

RISK IDENTIFIED

As disclosed in Notes 1.4.1.8 and 1.5.13.3 to the consolidated financial statements, your Group carries out part of their business activities through construction contracts for which revenues and margin are accounted for using the percentage of completion method. For each project, this stage of completion is determined by bringing the costs incurred as at December 31, 2019 to the total estimated costs of the contract. This method aims at keeping the level of expenses incurred and recognize the margin based only on accounted revenues.

The determination of revenues and margin relating to construction contracts depends on data at completion forecasted by operational and financial managers. These estimates are reviewed on a quarterly basis or more frequently in the event of any major development as the projects evolve. When the total contract costs may exceed total contract revenues, the expected loss at termination is recognized as an expense immediately. We considered the accounting of revenues relating to construction contracts as a key audit matter given the estimative nature of this process.

OUR RESPONSE

In the context of our work, the procedures set up in the significant subsidiaries in terms of contribution to revenues of construction contracts consisted of:

- testing key controls related to project management process;
- recomputing revenues using the percentage of completion method;
- performing the necessary reconciliations between management reporting data (revenues, costs and margin) and accounting records;
- performing the work program detailed below on a sample of contracts.

We thus analyzed a sample of contracts selected on the basis of the following criteria:

- significant margin contribution for the year;
- significant fluctuation of data at termination during the period;
- contracts presenting specific significant risks (technical, contractual, geopolitical, etc.).

For each of the contracts selected, our work consisted in:

- meeting with operational and financial managers of the considered contract ("*revue d'affaire*") to take note of the operational situation of the project (examination of the significant events during the period, risks assessment, analysis of costs to be committed to complete the project);
- performing reconciliations between costs at termination analyzed during our "*revue d'affaire*" and costs at termination used for the calculation of the percentage of completion;
- comparing the amounts outlined in the contracts and/or contract amendments to revenues at termination used to determine the revenues to be recorded for the year ended December 31, 2019.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information given in the Group's management report of the Board of Directors.

We have no matters to report as to their fair presentation and their consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L. 225-102-1 of the French Commercial Code *(Code de commerce)* is included in the Group's information given in the management report, it being specified that, in accordance with the provisions of Article L. 823-10 of this Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained in this statement which has to be subject to a report by an independent third party.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as Statutory Auditors of SUEZ by your Annual General meeting held on July 15, 2008 for MAZARS and on December 21, 2007 for ERNST & YOUNG et Autres.

As at December 31, 2019, MAZARS and ERNST & YOUNG et Autres were in the 12th year and 13th year of total uninterrupted engagement, which is the 12th year since securities of the Company were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Courbevoie and Paris-La Défense, February 26, 2020

The Statutory Auditors French original signed by

MAZARS		ERNST & YOUNG ET AUTRES
Achour Messas	Dominique Muller	Stéphane Pédron

18.3 Parent Company financial statements

18.3.1 Balance sheet assets

(in thousands of euros)	Reference in Notes		December 31, 2019 Gross	Amortization and depreciation	Net	December 31, 2018 Net
Fixed assets						
Intangible assets		Note 1	**30,817.7**	**(813.0)**	**30,004.7**	**30,004.7**
Property, plant and equipment		Note 1	**48.3**	**(4.0)**	**44.3**	**11.7**
Equity interests		Note 1	9,160,781.2	–	9,160,781.2	9,160,781.2
Receivables related to equity interests		Notes 1 & 2	7,792,694.7	–	7,792,694.7	7,778,750.2
Other financial assets		Notes 1 & 2	29,877.4	(33.6)	29,843.8	29,232.2
Financial Assets		Note 1	**16,983,353.3**	**(33.6)**	**16,983,319.7**	**16,968,763.6**
Fixed assets	I		**17,014,219.3**	**(850.6)**	**17,013,368.7**	**16,998,780.0**
Current assets						
Advances and down payments on orders		Note 2	**29.9**	**–**	**29.9**	**26.6**
Trade and related receivables		Note 2	39,800.4	(1,493.2)	38,307.2	36,398.2
Other receivables		Note 2	153,502.1	–	153,502.1	101,235.7
Current accounts		Note 2	1,022,685.3	–	1,022,685.3	765,879.6
Accrued income from cash instruments		Note 2	16,829.8	–	16,829.8	39,850.1
Receivables			**1,232,817.6**	**(1,493.2)**	**1,231,324.4**	**943,363.6**
Cash and cash equivalents			568,933.9	–	568,933.9	807,741.6
Marketable securities		Note 3	47,570.5	(4,446.2)	43,124.3	42,879.0
Cash, cash equivalents & short-term securities			**616,504.4**	**(4,446.2)**	**612,058.2**	**850,620.6**
Deferred income		Note 4	**44,400.5**	**–**	**44,400.5**	**51,849.4**
Bond redemption premiums			**40,207.6**	**–**	**40,207.6**	**44,509.1**
Current assets	II		**1,933,960.0**	**(5,939.4)**	**1,928,020.6**	**1,890,369.3**
Foreign exchange gains/losses	III	Note 9	**3,234.2**	**–**	**3,234.2**	**11,539.5**
Total assets	(I+II+III)		**18,951,413.5**	**(6,790.0)**	**18,944,623.5**	**18,900,688.9**

18.3.2 Balance sheet liabilities

(in thousands of euros)		Reference in Notes	December 31, 2019	December 31, 2018
Shareholders' equity				
Share capital			2,485,450.3	2,485,450.3
Additional paid-in capital			5,215,174.8	5,215,174.8
Legal reserve			248,545.0	248,545.0
Retained earnings			71,843.6	86,764.8
Net income for the year			917,186.6	386,840.8
Shareholders' equity	I	Note 5	**8,938,200.3**	**8,422,775.7**
Provisions for contingencies and losses				
Provisions for contingencies			7,581.6	11,786.4
Provisions for losses			59,114.7	123,019.5
Provisions for contingencies and losses	II	Note 6	**66,696.3**	**134,805.9**
Liabilities				
Bonds			7,246,593.9	7,824,103.8
Bank borrowings			678,417.0	641,834.1
Deeply subordinated Notes			1,771,800.7	1,629,522.6
Participating bonds			50.6	100.0
Current accounts and borrowings from subsidiaries			158,748.7	145,079.6
Financial debt		Notes 7 & 8	**9,855,610.9**	**10,240,640.1**
Trade and related payables			11,856.9	13,616.1
Tax and employee-related debt			21,922.5	20,214.7
Debt on fixed assets and related accounts			10.1	11.1
Accrued expenses on cash instruments			408.9	5,264.7
Other liabilities			33,521.8	33,830.1
Operating payables		Note 8	**67,720.2**	**72,936.7**
Liabilities	III		**9,923,331.1**	**10,313,576.8**
Deferred income	IV	Note 4	**12,110.4**	**18,376.6**
Foreign exchange gains/losses	V	Note 9	**4,285.4**	**11,153.8**
Total liabilities	(I+II+III+IV+V)		**18,944,623.5**	**18,900,688.9**

18.3.3 Income statement

(in thousands of euros)		Reference in Notes	December 31, 2019	December 31, 2018
Provisions of services		Note 10	91,186.5	82,724.6
Other income			(101.0)	407.9
Operating grants			–	14.0
Reversals of depreciation and amortization, provisions and transferred expenses		Note 11	117,180.8	4,769.2
Operating income			**208,266.3**	**87,915.7**
Other purchases and external expenses			(37,603.6)	(36,067.8)
Taxes and similar			(4,006.3)	(4,818.1)
Wages and salaries			(28,097.6)	(21,542.3)
Payroll taxes			(9,764.3)	(10,596.4)
Provisions for bonus shares		Note 6	(34,346.3)	(20,307.2)
Allocation to amortization and depreciation			(0.1)	(0.1)
Allocation to other provisions			(13,539.3)	(13,190.2)
Other current management expenses			(5,551.9)	(640.8)
Operating expenses			**(132,909.4)**	**(107,162.9)**
Operating income	I		**75,356.9**	**(19,247.2)**
Financial income from equity interests			943,489.9	511,647.6
Other financial income			58,690.2	56,640.3
Other interest and similar income			70,598.3	80,308.9
Gain on disposal of marketable securities			–	56.4
Reversals of provisions and transferred expenses		Note 11	16,031.7	9,050.8
Foreign exchange gains			1,481.0	1,211.5
Financial income			**1,090,291.1**	**658,915.5**
Interest and similar expenses			(306,261.9)	(290,680.9)
Allocation to amortization and provisions			(10,079.0)	(26,368.7)
Foreign exchange losses			(1,401.0)	(826.2)
Financial expenses			**(317,741.9)**	**(317,875.8)**
Net financial income (loss)	II	Note 12	**772,549.2**	**341,039.7**
Pre-tax current profit (loss)	III=I+II		**847,906.1**	**321,792.5**
Non-recurring gains from management operations			–	–
Non-recurring gains from financial transactions			501.1	1,317.1
Reversals of provisions and transferred expenses		Note 11	130.0	1,558.6
Non-recurring gains			**631.1**	**2,875.7**
Non-recurring expenses from management operations			(8,232.9)	(2,966.1)
Non-recurring expenses from financial transactions			(2,152.0)	(1,600.0)
Allocation to amortization and provisions			(4,211.4)	(130.0)
Non-recurring expenses			**(14,596.3)**	**(4,696.1)**
Non-recurring income	IV	Note 13	**(13,965.2)**	**(1,820.4)**
Employee profit-sharing	V		**(750.3)**	**(832.0)**
Corporate income tax (tax consolidation gain)	VI	Note 14	**83,996.0**	**67,700.6**
Net income	III+IV+V+VI		**917,186.6**	**386,840.8**

18.3.4 Cash flow statement

(in thousands of euros)	Reference in Notes	December 31, 2019	December 31, 2018
Net income		917,186.6	386,840.8
Net depreciation, amortization and provisions		(71,048.8)	23,735.9
Gross cash flow		**846,137.8**	**410,576.6**
Change in net working capital		(21,342.3)	13,576.2
Net cash flow from operations		**824,795.5**	**424,152.9**
Acquisitions of property, plant and equipment and intangible assets	Note 1	(32.7)	10.4
Change in related receivables		175.6	(500,866.9)
Change in other financial assets	Note 1	(615.7)	(2,525.4)
Net cash flow from investments		**(472.8)**	**(503,381.9)**
Dividends paid to shareholders		(401,762.0)	(401,920.8)
Purchase of treasury shares		(245.4)	3,766.8
Change in current accounts		(256,805.7)	(195,393.7)
Bonds		(548,018.5)	399,766.4
Deeply subordinated notes		147,850.6	100.0
Change in other financial debt		36,583.0	241,834.1
Purchase/sale of negotiable medium-term notes		–	30,018.6
Accrued interest and premiums		(40,732.4)	426.7
Net cash flow from financing activities		**(1,063,130.4)**	**78,597.9**
Net change in cash positions		**(238,807.7)**	**(631.1)**
Opening net cash		**807,741.6**	**808,372.7**
Closing net cash		**568,933.9**	**807,741.6**

18.3.5 Highlights for the year

New issue and purchase of Undated Deeply Subordinated notes

On September 12, 2019, SUEZ SA completed a new issue of undated deeply subordinated notes for a total amount of EUR 500 million, with an initial fixed coupon of 1.625% (revised in 2026, then every five years).

On the same date, SUEZ SA partially redeemed the bond issued on June 23, 2014 for EUR 352.1 million out of an initial amount of EUR 500 million with a fixed rate of 3.000%.

Following these transactions, the outstanding amount of undated deeply subordinated notes reached EUR 1.748 billion.

Bond redemption

On April 8, 2019, SUEZ SA redeemed an EUR 800 million bond (nominal amount) with a 6.250% coupon issued on April 8, 2009.

New bond issue

On October 14, 2019, SUEZ SA launched a new 12-year senior bond totaling EUR 700 million. The new notes will have a 0.500% fixed interest rate.

The funds raised are mainly allocated to refinancing the partial redemption of existing bonds:

- EUR 151.8 million out of an initial amount of EUR 750 million with a 4.078% coupon, maturing in 2021;
- EUR 135.3 million out of an initial amount of EUR 750 million with a 4.125% coupon, maturing in 2022;
- EUR 123.6 million out of an initial amount of EUR 500 million with a 2.750% coupon, maturing in 2023;
- EUR 39.0 million out of an initial amount of EUR 500 million with a 5.500% coupon, maturing in 2024;

for a total nominal amount of EUR 449.7 million.

18.3.6 Accounting principles and policies

The annual financial statements have been prepared in accordance with legal and regulatory provisions applicable in France based on France's national accounting standards body, the ANC *(Autorité des Normes Comptables)* regulation 2014-03 relating to French Generally Accepted Accounting Principles (GAAP), as amended with subsequent regulations published.

Financial transactions relating to equity interests and related receivables, in particular impairment and impairment reversals, have been included under non-recurring income instead of under net financial income. Pursuant to Article 120-2 of the GAP, SUEZ considers that this classification, which deviates from the General Accounting Plan, gives a more accurate picture of the income statement, as it allows all gains and losses from disposals to be grouped together with income items related to equity interests under non-recurring income.

The fiscal year spans a 12-month period from January 1 to December 31, 2019.

Intangible assets

Intangible assets are assessed at their purchase or production cost.

Intangible assets are amortized following the straight-line method and the amortization period ranges from 1 to 5 years. This heading includes licenses and trademarks. However, trademarks are acquired for an unlimited term and are not amortized.

Moreover, R&D expenses are booked under charges for the year in which they are incurred.

Property, plant and equipment

Property, plant and equipment are assessed at their purchase cost.

Property, plant and equipment are depreciated following the straight-line method and their depreciation period is based on their useful life, determined according to the expected use of the assets. The useful lives of main asset items are set within the range of 3 to 10 years.

Financial assets

EQUITY INVESTMENTS

Equity investments are long-term in nature and provide the Company with control or significant influence over the issuer, or help it to establish business relations with the issuer.

New investments are recognized at acquisition cost plus directly related external incidental expenses.

Following the change in the tax treatment of equity interest acquisition costs resulting from Article 21 of the French Finance Act of 2007, and based on notice 2007-C of the French National Accounting Council *(Conseil national de la comptabilité* – CNC), SUEZ accounts for the tax deferral of such costs over five years in an account for special depreciation allowances.

In the case of equity interests intended to be held on a long-term basis by SUEZ, a depreciation allowance is made to adjust the acquisition value to their value in use, the estimation of which is primarily based on their intrinsic value, time value, expected cash flows, stock prices, and taking into account potential currency hedges.

With regard to equity interests SUEZ has decided to divest, the book value of such interests is adjusted to their market value if this is lower. If negotiations are underway, this value is determined by reference to the best estimate available.

RECEIVABLES RELATED TO EQUITY INTERESTS

These receivables are loans to companies in which SUEZ holds an equity interest.

Related receivables are recognized at their nominal value. Receivables denominated in a foreign currency are reported using the exchange rate prevailing at the end of the period. In line with the treatment adopted for equity investments, related receivables are written down if the associated risk is higher than the value of the securities and if the securities have already been depreciated.

OTHER FINANCIAL ASSETS

These mainly include mutual funds held by SUEZ under a liquidity contract. A provision may be constituted based on the criteria used for equity investments as described above.

Receivables

Receivables reported within current assets are carried on the balance sheet at their nominal value, with non-payment risk analyzed on a case-by-case basis. Bad debts are depreciated in an amount corresponding to the risk incurred.

Treasury shares

SUEZ treasury shares are recognized on the date of their delivery, at their acquisition cost excluding transaction fees.

Shares intended to be held on a long-term basis, for cancellation or trading purposes, are recognized under financial assets.

Shares acquired as part of buyback programs or a liquidity contract[1] are shown under marketable securities. Shares held as part of bonus share plans are part of such programs and are therefore also shown under marketable securities.

In the case of assigned shares, their cost price is established by allocation category according to the first in-first out (FIFO) method.

(1) SUEZ signed a liquidity contract with an investment services provider. SUEZ has the investment services provider work on behalf of the Company purchasing and buying SUEZ shares daily in an effort to ensure liquidity and promote the Company's shares on the Paris stock market. Fees paid to this service provider are shown in "Other financial assets".

When the market value of SUEZ shares classified as marketable securities falls below their acquisition cost, a provision for impairment for an amount equal to the difference is recorded as net financial income (liquidity contract). This market value is measured on the basis of the average closing price in the settlement month.

Marketable securities, excluding treasury shares

Marketable securities are recognized at acquisition cost. If the closing market price is less than their book value, a provision for impairment is recognized for the difference. In the case of listed securities, their market value is measured at the average closing price in the settlement month.

Foreign currency transactions

Income and expenses denominated in foreign currencies are recorded at their equivalent value in euros at the transaction date.

Foreign currency receivables, payables and cash and cash equivalents are translated at the exchange rate prevailing at period-end. Foreign exchange gains and losses are posted to income when they relate to cash and cash equivalents, or to the balance sheet under "Translation adjustments" when they relate to receivables and payables. Unrealized losses are provisioned.

Provisions for contingencies and losses

A provision is established when the Company has a legal or constructive obligation toward a third party resulting from a past event, and for which it is likely that it will generate an outflow of resources representative of future economic advantages without at least equivalent compensation anticipated from the third party that can be reliably estimated, pursuant to ANC regulation 2014–03 concerning liabilities.

The amount recognized as a provision should be the best estimate of the expenditure required to settle the obligation at the end of the reporting period.

PROVISION FOR BONUS SHARES AWARDED TO EMPLOYEES

In keeping with ANC regulation 2014–03, the provision for employee bonus share plans is made on a straight-line basis over the vesting period for employees, and ultimately covers the loss on disposal equal to the book value of the bonus treasury shares allocated to employees. This provision is recognized in "Provisions for losses" and has an impact on the Company's operating income.

PENSIONS

The actuarial method used is the projected unit credit method. The valuation of Company undertakings regarding retirement, early retirement, severance packages and benefit schemes is based on actuarial valuations. These calculations include mortality assumptions, staff turnover and future salary increases, as well as a discount rate determined according to the yield, at the assessment date, of bonds issued by top-tier companies.

PROVISIONS FOR EQUITY INTEREST RISK

The Company may establish provisions for contingencies if it believes that its commitments exceed assets held or if some of its equity interests harbor risk that may not materialize as an asset impairment.

Financial payables

BOND ISSUE PREMIUMS AND COSTS

Bond issues that include a premium are recognized as liabilities on the balance sheet at their total value, including any redemption premium. In return, the latter are recognized as assets on the balance sheet under "redemption premiums" and are amortized on a straight-line basis throughout the life of the bond.

Issue premiums received are deducted from the issue costs. Any difference outstanding is recorded under prepaid income over the term of the bond.

In accordance with the CNC recommendation, bond issuance costs are amortized on a straight-line basis over the lifetime of the contracts concerned. Issuance costs mainly include broker's commissions.

UNDATED DEEPLY SUBORDINATED NOTES

In accordance with Recommendation 28 from the *Ordre des Experts Comptables* (French institute of chartered accountants) issued in October 1994, Undated Deeply Subordinated Notes are classified as financial debt. The issue premium is recorded under assets in the balance sheet and tax-deductible interest paid annually is recognized under financial expenses in the income statement. Issuance costs are amortized over the lifetime of the contracts on a straight-line basis.

Financial and operating instruments

SUEZ participates in the derivatives market to manage and reduce its exposure to interest and exchange rate volatility or to secure the value of certain financial assets. In accordance with the new ANC regulation 2015–05 of July 2, 2015 on the accounting treatment of forward financial instruments and hedging transactions:

- no provisions are made for unrealized losses ascertained at period-end on financial instruments held for hedging purposes by SUEZ and presented in off-balance-sheet commitments;
- gains and losses on interest rate and/or foreign exchange swaps are recognized on a prorata temporis basis in the income statement as financial profit/loss over the lifetime of the underlying assets. Premiums paid for options are recognized on the same basis.

Corporate income tax and tax consolidation

New measures to limit interest deductions from the ATAD directive, which has been codified into French law (Article 212 *bis* of the French General Tax Code and 223B bis of the French General Tax Code for tax consolidation groups) took effect on January 1, 2019.

This law established a general rule to cap net financial expenses at 30% of earnings before tax, interest, provisions and amortization (EBITDA for tax purposes) or at EUR 3 million if this amount is greater, with a more restrictive adaptation for undercapitalized companies.

SUEZ SA is the Parent Company of a French tax consolidation group created in 2008 and consisting of 123 companies in fiscal year 2019.

18.3.7 Notes to the financial statements

Note 1 Assets

1. Property, Plant and Equipment and Intangible Assets

Changes in gross values are analyzed as follows:

(in thousands of euros)	December 31, 2018	Increase	Decrease	December 31, 2019
Software	758.4			758.4
Brand	30,004.7			30,004.7
Other	54.6			54.6
Intangible assets	**30,817.7**	**–**	**–**	**30,817.7**
Office equipment	4.5			4.5
Works in progress	11.1	32.7		43.8
Property, plant and equipment	**15.6**	**32.7**	**–**	**48.3**
Property, plant and equipment and intangible assets	**30,833.3**	**32.7**	**–**	**30,866.0**

Amortizations and depreciations are analyzed as follows:

(in thousands of euros)	December 31, 2018	Allowances	Reversals	December 31, 2019
Software	758.4			758.4
Other	54.6			54.6
Intangible assets	**813.0**	**–**	**–**	**813.0**
Office equipment	3.9	0.1		4.0
Property, plant and equipment	**3.9**	**0.1**	**–**	**4.0**
Property, plant and equipment and intangible assets	**816.9**	**0.1**	**–**	**817.0**

The net values of property, plant and equipment and intangible assets are analyzed as follows:

INTANGIBLE ASSETS, NET

(in thousands of euros)	Software	Brands	Current	Total intangible assets
As of December 31, 2018	–	30,004.7	–	30,004.7
As of December 31, 2019	**–**	**30,004.7**	**–**	**30,004.7**

TANGIBLE ASSETS, NET

(in thousands of euros)	Office equipment	Plant and equipment	Works in progress	Total property, plant and equipment
As of December 31, 2018	0.6	–	11.1	11.7
As of December 31, 2019	**0.5**	**–**	**43.8**	**44.3**

2. Financial Assets

(in thousands of euros)	December 31, 2018	Increase	Decrease	Impairment	December 31, 2019
Consolidated equity investments [a]	9,160,781.2				9,160,781.2
Equity investments	**9,160,781.2**	**–**	**–**	**–**	**9,160,781.2**
Receivables related to equity interests [b]	7,778,750.2	14,117.7	(173.2)		7,792,694.7
Other financial assets [c]	29,232.2	35,845.5	(35,229.8)	(4.1)	29,843.8
Other financial assets	**7,807,982.4**	**49,963.2**	**(35,403.0)**	**(4.1)**	**7,822,538.5**
Financial assets	**16,968,763.6**	**49,963.2**	**(35,403.0)**	**(4.1)**	**16,983,319.7**

(a) Consolidated equity interests include participation in SUEZ Groupe and in Acea.
(b) All receivables related to equity interests concern SUEZ Groupe.
(c) As of December 31, 2019, other financial assets mostly involve sums paid to the investment service provider under the liquidity contract.

Note 2 Maturity of receivables

(in thousands of euros)	Net amount at December 31, 2019	Less than one year	More than one year
Receivables related to equity interests	7,792,694.7	(173.2)	7,792,867.9
Other financial assets	29,843.8	29,843.8	
Receivables on non-current assets	**7,822,538.5**	**29,670.6**	**7,792,867.9**
Advances and down payments on orders	29.9	29.9	
Trade and related receivables	38,307.2	38,307.2	
Other receivables	153,502.1	153,502.1	
Current accounts	1,022,685.3	1,022,685.3	
Accrued income from cash instruments	16,829.8	16,829.8	
Receivables on current assets	**1,231,354.3**	**1,231,354.3**	**–**
Total receivables	**9,053,892.8**	**1,261,024.9**	**7,792,867.9**

"Other receivables" mostly comprise a receivable *vis-à-vis* the State for EUR 153.5 million. This amount includes the 2019 tax consolidation gain benefiting SUEZ as the Parent Company of the tax group (EUR 84.5 million) and various tax credits from subsidiaries pending refund from the State (EUR 68.6 million), including the Research Tax Credit *(Crédit d'Impôt Recherche* – CIR) and Sponsorship Tax Credit *(Crédit d'Impôt Mécénat)*.

Note 3 Marketable securities

This item includes:

(in thousands of euros)	December 31, 2019	December 31, 2018
Treasury shares held under bonus share plans	47,061.1	48,468.4
Treasury shares held under the liquidity contract	509.4	3,352.0
Gross amount	**47,570.5**	**51,820.4**
Provisions for impairment of treasury shares held	(4,446.2)	(8,941.4)
Provisions for impairment	**(4,446.2)**	**(8,941.4)**
Net carrying amount	**43,124.3**	**42,879.0**

Note 4 Deferred expenses, deferred income, and accruals

Accruals break down as follows:

(in thousands of euros)	December 31, 2018	Increase	Decrease	December 31, 2019
Issuance costs	30,580.4	4,350.0	(9,425.3)	25,505.1
Credit facility set-up fees	178.1	3,555.0	(652.1)	3,081.0
Prepaid expenses	21,090.9	1,850.1	(7,126.6)	15,814.4
Deferred expenses	**51,849.4**	**9,755.1**	**(17,204.0)**	**44,400.5**

The EUR 4.35 million increase in issuance costs is related to the issue of:

- deeply subordinated notes totaling EUR 500 million in September 2019;
- a bond totaling EUR 700 million in October 2019.

The decrease in issuance costs and prepaid expenses is related to early redemptions of bonds on October 16, 2019 and a partial redemption of deeply subordinated notes on September 12, 2019. (See section 18.3.5: Highlights for the year)

The EUR 3.55 million increase in credit facility set-up fees concerns the renegotiation of the syndicated loan (Club Deal) in April 2019 for EUR 2.5 billion.

The maturity has been extended from February 2019 to February 2024, and the financial terms and conditions have been improved.

(in thousands of euros)	December 31, 2018	Increase	Decrease	December 31, 2019
Deferred income	18,376.6		(6,266.2)	12,110.4
Deferred income	**18,376.6**	**–**	**(6,266.2)**	**12,110.4**

Bond issues that include a premium are recognized as liabilities on the balance sheet at their total value, including any redemption premium. In return, the latter are recognized as assets on the balance sheet under "redemption premiums" and are amortized on a straight-line basis throughout the life of the bond.

Issue premiums received are deducted from the issue costs. Any difference outstanding is recorded under prepaid income over the term of the bond.

In accordance with the CNC recommendation, bond issuance costs are amortized on a straight-line basis over the lifetime of the contracts concerned. Issuance costs mainly include broker's commissions.

Accrued expenses and accrued income associated with receivables and payables can be analyzed as follows:

(in thousands of euros)	December 31, 2019	December 31, 2018
Interest on bonds issued	77,452.9	119,627.6
Interest on deeply subordinated notes	23,900.7	29,522.6
Accrued portion of interest expenses	**101,353.6**	**149,150.2**
Uninvoiced trade payables	11,436.5	12,341.1
Tax and employee-related debt	13,749.2	9,518.6
Debt on fixed assets and related accounts	10.1	11.1
Cash instruments	408.9	5,264.7
Other liabilities	389.4	225.9
Other accrued expenses	**25,994.2**	**27,361.4**
Accrued expenses	**127,347.8**	**176,511.6**

(in thousands of euros)	December 31, 2019	December 31, 2018
Interest on receivables related to equity interests	3,907.7	4,080.8
Invoices to be issued for trade receivables	2,995.2	14,392.0
Cash instruments	16,829.8	39,850.1
Accrued income	**23,732.7**	**58,322.9**

Note 5 Shareholders' equity

The share capital is fully paid up. Each share confers one vote.

	December 31, 2018	Increase/Reduction	Purchase/Sale	December 31, 2019
Outstanding shares	617,827,629		321,515	618,149,144
Treasury shares	3,534,950		(321,515)	3,213,435
Total number of shares	**621,362,579**	**–**	**–**	**621,362,579**

As of December 31, 2019, SUEZ holds 3,175,935 treasury shares acquired under employee share plans and 37,500 treasury shares acquired under a liquidity contract for a net book value of EUR 47.6 million, the market value of which was EUR 43.1 million as of December 31, 2019.

Changes in shareholders' equity were as follows:

(in thousands of euros)	Share capital	Additional paid-in capital	Legal reserve	Other reserves	Retained earnings	Net income for the year	Total
Balance as of December 31, 2018	**2,485,450.3**	**5,215,174.8**	**248,545.0**	**–**	**86,764.8**	**386,840.8**	**8,422,775.7**
2018 net income allocation					386,840.8	(386,840.8)	–
Dividend distributed for fiscal year 2018					(401,762.0)		(401,762.0)
Net income for fiscal year 2019						917,186.6	917,186.6
Balance as of December 31, 2019 before allocation of income	**2,485,450.3**	**5,215,174.8**	**248,545.0**	**–**	**71,843.6**	**917,186.6**	**8,938,200.3**

The rights assigned under different plans regarding SUEZ shares progressed as follows over the course of the fiscal year:

Bonus share allocation and performance share plans

		Allotment of bonus shares		
	Performance shares	Matching of shares under Sharing arrangement [a]	Matching of shares under Sharing arrangement [a]	
(number of shares)	July 2018	July 2014	December 2017	Total
Shares allocated and undelivered as of January 1, 2019	708,535	97,998	140,512	947,045
Allocated				–
Delivered				–
Canceled or Expired	–	(97,998)		(97,998)
Net change over the financial year 2019 (including inventory correction at the end of 2018)	57,382			57,382
Shares allocated and undelivered as of December 31, 2019	**765,917**	**–**	**140,512**	**906,429**

(a) Employer's contribution paid to foreign employees (outside France and the United Kingdom).

As of December 31, 2019, SUEZ holds 3,175,935 treasury shares acquired under employee share plans and 37,500 treasury shares acquired under a liquidity contract.

Taking into account all the current plans (bonus share and performance share plans), the number of beneficiaries and staff turnover assumptions, SUEZ estimates its obligation to deliver shares under different vesting periods to be 906,429 shares.

In addition to the continuous service condition, some plans are subject to internal performance conditions. If the performance targets have not been met fully, the number of shares granted to employees is reduced in accordance with the plan rules.

Note 6 Provisions

(in thousands of euros)	December 31, 2018	Allocation	Reversal (Utilization)	December 31, 2019
Provisions for contingencies	**11,786.4**	**7,461.6**	**(11,666.4)**	**7,581.6**
Provisions for operating disputes	130.0		(130.0)	–
Provisions for foreign exchange losses	11,536.4	3,234.2	(11,536.4)	3,234.2
Provisions for restructuring	–	4,211.4	–	4,211.4
Provisions for personnel disputes	120.0	16.0		136.0
Provisions for losses	**123,019.5**	**35,059.2**	**(98,964.0)**	**59,114.7**
Pension provisions and similar	6,603.0	712.9	(6,337.9)	978.0
Provisions for bonus shares awarded to employees	116,416.5	34,346.3	(92,626.1)	58,136.7
Total	**134,805.9**	**42,520.8**	**(110,630.4)**	**66,696.3**
Income statement classification:				
Operating income		35,075.2	(98,964.0)	
Net financial income (loss)		3,234.2	(11,536.4)	
Non-recurring income		4,211.4	(130.0)	
Total		**42,520.8**	**(110,630.4)**	

The foreign exchange loss provision mainly covers the unrealized loss linked to receivables relating to equity interests contracted with SUEZ Groupe for GBP 245.7 million subscribed in 2011. See Note 9 "Translation adjustments".

The breakdown of the change in the provision for pensions and similar benefits is included in Note 16, "Post-employment benefits".

Note 7 Financial debt

(in thousands of euros)	Position as of December 31, 2019	Position as of December 31, 2018
Bonds (nominal amount)	7,169,141.0	7,704,476.2
Bank borrowings and debt (nominal amount)	678,417.0	641,834.1
Deeply subordinated notes (nominal amount)	1,747,900.0	1,600,000.0
Participating bond	50.6	100.0
Current accounts and borrowings from subsidiaries	158,748.7	145,079.6
Borrowings	**9,754,257.3**	**10,091,489.9**
Accrued portion of interest expenses	101,353.6	149,150.2
Other financial debt	**101,353.6**	**149,150.2**
Total financial debt	**9,855,610.9**	**10,240,640.1**

The change in financial debt corresponds principally to:

- the redemption of a bond on April 8, 2019 that was launched on April 8, 2009 for a nominal amount of EUR 800 million;
- the issue of EUR 500 million in subordinated notes on September 12, 2019;
- the partial redemption of various subordinated notes on September 12, 2019 that were issued in June 2014 for EUR 352.1 million;
- the implementation on October 14, 2019 of a bond issue of EUR 700 million over 12 years;
- the partial redemptions of bonds on October 16, 2019 for a total amount of EUR 449.7 million;
- the EUR 36.6 million increase in outstanding commercial paper classified as "Bank borrowings and debt".

Note 8 Maturity of debt and payables

		Due date		
(in thousands of euros)	Gross amount as of December 31, 2019	In 2020	From 2021 to end of 2024	In 2025 and beyond
Bonds (nominal amount)	7,169,141.0	450,000.0	2,050,300.0	4,668,841.0
Bank borrowings and debt (nominal amount)	678,417.0	678,417.0		
Deeply subordinated notes (nominal amount)	1,747,900.0			1,747,900.0
Participating bond	50.6	50.6		
Current accounts and borrowings from subsidiaries	158,748.7	158,748.7		
Other financial debt [a]	101,353.6	101,353.6		
Financial debt	**9,855,610.9**	**1,388,569.9**	**2,050,300.0**	**6,416,741.0**
Trade and related payables	**11,856.9**	**11,856.9**		
Tax and employee-related debt	**21,922.5**	**21,922.5**		
Debt on fixed assets and related accounts	10.1	10.1		
Accrued expenses on cash instruments	408.9	408.9		
Other	33,521.8	33,521.8		
Other liabilities	**33,930.7**	**33,930.7**	**–**	**–**
Total	**9,923,331.1**	**1,456,290.1**	**2,050,300.0**	**6,416,741.0**

(a) Includes the accrued portion of interest expenses and bank overdrafts (see Note 7).

18

Breakdown of bond issues (nominal amount):

(in thousands of euros)	Amount as of December 31, 2019	Issue date	Maturity date	Rate
Public placements				
(in thousands of euros)	461,000.0	7/22/2009	7/22/2024	5.500%
(in thousands of euros)	614,700.0	6/24/2010	6/24/2022	4.125%
(in thousands of euros)	598,200.0	5/17/2011	5/17/2021	4.078%
(in thousands of euros) [(a)]	293,841.0	12/2/2011	12/2/2030	5.375%
(in thousands of euros)	376,400.0	10/8/2013	10/9/2023	2.750%
(in thousands of euros) [(b)]	350,000.0	2/27/2014	2/27/2020	0.000%
(in thousands of euros)	500,000.0	5/19/2016	5/19/2028	1.250%
(in thousands of euros)	500,000.0	4/3/2017	4/3/2025	1.000%
(in thousands of euros)	700,000.0	4/3/2017	4/3/2029	1.500%
(in thousands of euros)	500,000.0	9/21/2017	9/21/2032	1.625%
(in thousands of euros)	500,000.0	9/10/2015	9/10/2025	1.750%
(in thousands of euros)	500,000.0	9/17/2018	9/17/2030	1.625%
(in thousands of euros)	700,000.0	10/14/2019	10/14/2031	0.500%
Private placements				
(in thousands of euros) [(c)]	250,000.0	6/8/2009	6/8/2027	1.904%
(in thousands of euros)	100,000.0	3/25/2013	3/25/2033	3.300%
(in thousands of euros)	100,000.0	4/5/2013	4/6/2020	1.747%
(in thousands of euros)	75,000.0	5/21/2014	5/21/2029	2.000%
(in thousands of euros)	50,000.0	6/30/2015	7/1/2030	2.250%
Total	**7,169,141.0**			

(a) GBP 250 million.
(b) "OCEANE" bond.
(c) Coupon of 5.20% until 2017, then 1.904% until maturity in 2027.

Breakdown of deeply subordinated notes (nominal amount):

(in thousands of euros)	Amount as of December 31, 2019	Issue date	Maturity date	Rate
Deeply subordinated notes	147,900.0	6/23/2014	perpetual	3.000%
Deeply subordinated notes	500,000.0	3/30/2015	perpetual	2.500%
Deeply subordinated notes	600,000.0	4/19/2017	perpetual	2.875%
Deeply subordinated notes	500,000.0	9/12/2019	perpetual	1.625%
Total	**1,747,900.0**			

Note 9 Translation adjustments

The following translation adjustments were recognized as a result of the revaluation of receivables and debt denominated in foreign currencies at the exchange rate prevailing on December 31, 2019:

(in thousands of euros)	Unrealized loss	Unrealized gain
Translation adjustments on:		
► Receivables related to equity interests	22.5	2,832.1
► Trade and related receivables	0.6	
► Bonds	3,210.9	
► Bank borrowings and debts		1,453.4
Receivables related to equity interests		
► Trade and other payables	0.2	
Total	**3,234.2**	**4,285.4**

The foreign exchange exposure, established in accordance with the accounting principles described in section 18.3.6, "Accounting principles and policies", highlights the following as of December 31, 2019:

- an unrealized gain of EUR 2,832,100 linked to fluctuations in the pound sterling relating to the associated debt incurred with SUEZ Groupe for GBP 245.7 million;
- a net unrealized loss of EUR 3,210,900 linked to fluctuations in the pound sterling relating to the bond issue of GBP 250 million subscribed in 2011;
- an unrealized gain of EUR 1,453,400 linked to fluctuations in the US dollar relating to commercial paper issued in 2019.

Note 10 Services and other income

Services amounting to EUR 91.2 million correspond principally to services billed to SUEZ Groupe and to the billing of licensing fees for the SUEZ brand.

Note 11 Reversals of depreciation and amortization, provisions and transferred expenses

(in thousands of euros)	December 31, 2019	December 31, 2018
Transferred expenses	**12,560.6**	**3,201.2**
Bond issuance costs	121.1	275.2
Charges related to restructuring	12,376.2	–
Charges related to insurance	63.3	72.1
Severance payment costs	–	2,853.9
Reversals of provisions for stock options and bonus shares	**91,485.1**	**–**
Reversals of provisions for impairment on receivables	**5,793.4**	**–**
Reversals of provisions for restructuring	**–**	**1,558.7**
Other	**7,471.7**	**1,568.0**
Reversals of provisions for employee benefits	7,341.7	1,568.0
Others	130.0	
Financial	**16,031.7**	**9,050.8**
Total	**133,342.5**	**15,378.7**

Expenses relating to bond issues and credit line set-up fees are recognized as assets in the balance sheet and amortized over the lifetime of these instruments. They correspond to fees paid to intermediaries for setting up these instruments.

Restructuring costs include:

- EUR 11.5 million to reorganize General Management as part of the new Group strategy announced on October 2, 2019 (SUEZ 2030);
- EUR 0.9 million balance from salary costs generated in connection with the voluntary redundancy scheme decided in 2017.

The reversal of the provision for purchase options and bonus shares corresponds to the Sharing 2014 employee shareholding plan maturing on July 21, 2019.

The reversal of the financial provision for EUR 16 million is due to the reversal of the provision for foreign exchange losses set up in 2018 for EUR 11.3 million on the GBP 245.7 million receivable taken out by SUEZ Groupe and for EUR 0.2 million related to the fluctuation in the US dollar on commercial paper issued in 2018 as well as a reversal in provision on treasury shares for EUR 4.5 million.

18

Note 12 Net financial income (loss)

(in thousands of euros)	December 31, 2019	December 31, 2018
Dividends received	943,489.9	511,647.6
Interest on receivables related to equity interests	58,690.2	56,640.3
Interest on current accounts	1,880.1	7,401.4
Interest on cash instruments	34,408.8	40,455.4
Other interest and similar income	(271,952.5)	(258,172.4)
Foreign exchange gain/(loss)	80.0	385.3
Net financial provisions	5,952.7	(17,317.9)
Total	**772,549.2**	**341,039.7**

Dividends received in 2019 of EUR 943.5 million correspond to the dividends paid by:

- SUEZ Groupe in the amount of EUR 927 million in 2018;
- Acea in the amount of EUR 16.5 million in 2018.

Interest on receivables associated with equity interests and on current accounts mainly correspond to interest paid by SUEZ Groupe.

The foreign exchange result is composed of gains and losses realized in the settlement of currency transactions.

Other interest and similar income relate mainly to interest expense on bonds.

Changes during the year are primarily due to:

- early redemption fees for bond debt in September and October 2019, for -EUR 52.5 million;
- cash payments on the unwound derivatives following the redemption of the October 2019 bond debt for an amount of EUR 20.7 million.

Net financial provisions of EUR 5.9 million involve:

- a provision for currency exchange losses of -EUR 3.2 million related to the issue in GBP;
- amortizations of issue premiums linked to bonds for -EUR 6.9 million;
- the reversal of the provision for impairment of treasury shares set up in 2018 for EUR 4.5 million;
- the reversal of the provision for foreign exchange losses set up in 2018 for EUR 11.5 million (see Note 11).

Note 13 Non-recurring income

Non-recurring income can be analyzed as follows:

(in thousands of euros)	December 31, 2019	December 31, 2018
Non-recurring expenses from management operations	(8,164.8)	(2,853.9)
Allowances and reversals of provisions for restructuring	(4,211.4)	1,558.6
Miscellaneous allowances and reversals of provisions	130.0	(130.0)
Gain/(loss) from disposal of treasury shares	(1,382.5)	(103.7)
Other	(336.5)	(291.4)
Total	**(13,965.2)**	**(1,820.4)**

Non-recurring expenses from management operations for EUR 8.2 million correspond to Group reorganization costs for EUR 7.3 million and to the balance from salary costs generated in connection with the voluntary redundancy scheme decided in 2017 for EUR 0.9 million.

Allocations to provisions for restructuring for EUR 4.2 million correspond to Group reorganization costs (see Note 11).

Note 14 Corporate income tax and tax consolidation

(in thousands of euros)	December 31, 2019	December 31, 2018
Tax consolidation gain/(loss) for the fiscal year	84,496.0	70,935.2
Adjustment of prior fiscal year gain/(loss)	(174.9)	(2,872.2)
Corporate income tax and additional taxes	(325.1)	(362.4)
Tax income (expense) for the fiscal year	**83,996.0**	**67,700.6**

Deferred tax position

The future tax liability position is the result of timing differences between the tax and accounting treatment of SUEZ revenues or expenses only:

(in thousands of euros)	December 31, 2019	December 31, 2018
Tax loss carried forward (base) (1)	**550,627.9**	**453,777.0**
Issue costs for deeply subordinated notes	5,436.0	4,571.0
Increase in future tax liabilities (base) (2)	**5,436.0**	**4,571.0**
Provisions for non-deductible contingencies and losses	1,336.0	9,054.0
Other non-deductible provisions	838.0	937.0
Non-deductible provisions in the year of their recognition	**2,174.0**	**9,991.0**
Difference between book value and tax value of marketable securities	4,577.0	9,068.0
Other	**4,577.0**	**9,068.0**
Credits for future tax liabilities (base) (3)	**6,751.0**	**19,059.0**
Total: (1)–(2)+(3)	**551,942.9**	**468,265.0**

The sum of these timing differences is EUR 551.9 million, which represents a theoretical net tax liability of EUR 159.9 million calculated based on the tax rate applicable in France as of December 31, 2019.

Note 15 Off-balance sheet commitments

Financial commitments given

Regarding its net debt position, SUEZ applies a policy of optimization of financing costs using several types of financial derivatives (interest rate swaps and options) depending on market conditions.

	Notional as of December 31, 2019					Fair value of derivatives at December 31, 2019	Notional at December 31, 2018
(in thousands of euros)	Under one year	One to five years	Six to ten years	Over ten years	Total		
Interest rate swap							
► fixed-rate payer/floating-rate receiver	–	817,000.0	600,000.0	300,000.0	1,717,000.0	78,053.5	2,000,000.0
► floating-rate payer/fixed-rate receiver					–		50,000.0
Total	**–**	**817,000.0**	**600,000.0**	**300,000.0**	**1,717,000.0**	**78,053.4**	**2,050,000.0**

The fair value of EUR 78.1 million represents the market value of derivatives in place on December 31, 2019.

Other financial commitments given

		Maturity		
(in thousands of euros)	December 31, 2019	End of 2020	2021 to 2024	2025 and beyond
Financing commitments				
Securities, endorsements and guarantees given to subsidiaries	11,213.0			11,213.0
Total	**11,213.0**	**–**	**–**	**11,213.0**

Financial commitments received

(in thousands of euros)	December 31, 2019	Maturity End of 2020	2021 to 2024	2025 and beyond
Credit facilities confirmed and unused	2,805,000.0	150,000.0	2,655,000.0	
Total	**2,805,000.0**	**150,000.0**	**2,655,000.0**	**–**

Operational commitments given

(in thousands of euros)	December 31, 2019	Maturity End of 2020	2021 to 2024	2025 and beyond
Operational commitments				
Securities, endorsements and guarantees given to subsidiaries	10,890.0		8,000.0	2,890.0
Total	**10,890.0**	**–**	**8,000.0**	**2,890.0**

SUEZ has given guarantees to the government of Hong Kong for the operation of several landfills.

Note 16 Post-employment benefits

SUEZ has granted post-employment benefits to its employees (retirement pensions, lump-sum retirement payments, medical coverage, benefits in kind), as well as other long-term benefits (long-service awards).

Overview of commitments

(in thousands of euros)	December 31, 2018	Current service cost	December 31, 2019
Pensions [a]	6,603.0	(5,625.0)	978.0
Total	**6,603.0**	**(5,625.0)**	**978.0**

(a) Pensions and retirement bonuses.

The sharp decrease in commitments corresponds to the solidification of rights of defined retirement benefit schemes (Article 39) under the Pacte bill. Total off-balance sheet commitments for other benefits (excluding retirement pension) amounted to around EUR 12 million.

Calculation of pensions and other employee benefit obligations

Pensions and other employee benefit obligations are the difference between the present value of future benefits and any unrecognized past service cost.

The current value of future benefits is determined according to the projected unit method.

The main assumptions used in calculating pensions and other similar commitments are as follows:

- long-term inflation rate: 1.75%;
- mortality tables: tables by generation.

Note 17 Personnel

Personnel for the year breaks down as follows:

	December 31, 2019	December 31, 2018
Operational staff	12	13
Supervisory staff	14	17
Management staff	156	146
Total	**182**	**176**

Note 18 Related-party transactions

(in thousands of euros)	Related companies
Equity investments	8,857,390.3
Receivables related to equity interests	7,792,694.7
Trade and related receivables	36,991.6
Current accounts	158,748.7
Current account overdrafts	957,635.1
Trade and related payables	1,102.3
Interest on receivables related to equity interests	58,690.2
Interest on current account overdrafts	1,830.9

The items presented above exclusively correspond to relations with SUEZ Groupe.

Note 19 Subsidiaries and equity interests

(in thousands of euros) Business name	Share capital	Reserves and retained earnings	% of capital held as of December 31, 2019	Book value of securities held as of December 31, 2019 Gross	Provision	Revenues for previous fiscal year	Net profit/loss in previous fiscal year	Previous fiscal year reporting date	Currency
A – Detailed disclosure information concerning equity interests with a gross value in excess of 1% of SUEZ's capital									
1. Subsidiaries (over 50% capital held by SUEZ)									
SUEZ Groupe SAS Tour CB21 16, place de l'Iris 92040 Paris–La Défense SIREN: 410 118 608	3,371,215	267,187	100%	8,857,390	–	169,241	472,145	dec-19	EUR
2. Equity interests (between 10% and 50% capital held by SUEZ)									
ACEA S.P.A Piazzale Ostiense, 2 00154 Rome, Italy	1,098,899	189,920	10.85%	303,391	–	171,823	147,776	dec-18	EUR
B – Disclosures concerning other subsidiaries and equity interests									
1. Subsidiaries									
None									
2. Equity interests									
None									

As figures for 2019 are not available for ACEA S.P.A, the information shown relates to 2018.

Note 20 Compensation of Board of Directors members, the Chief Executive Officer and the Chairman of the Board of Directors

The gross compensation paid to the Chief Executive Officer in 2019 was EUR 1,383,300.

The gross compensation paid to the Chairman of the Board of Directors in 2019 was EUR 164,500.

The members of the Board of Directors receive Directors' fees. The maximum annual amount was set by the Shareholders' Meeting of May 22, 2014 at EUR 700,000.

Note 21 Subsequent events

No significant events occurred after the closure of the accounts on December 31, 2019.

Five-year financial summary

	2019	2018	2017	2016	2015
Capital at year-end					
Share capital *(in euros)*	2,485,450,316	2,485,450,316	2,493,450,316	2,257,604,984	2,170,573,872
Number of shares issued	621,362,579	621,362,579	623,362,579	564,401,246	542,643,468
Operations and profit/loss for the fiscal year *(in thousands of euros)*					
Provision of services excluding taxes	91,186.5	82,724.6	73,015.7	70,608.0	36,065.4
Income before tax, employee profit sharing, amortization and depreciation, and provisions	775,335.1	367,790.7	399,093.2	373,041.6	192,161.0
Employee profit-sharing	(750.3)	(832.0)	(491.5)	(1,043.4)	(588.4)
Corporate income tax expense	83,996.0	67,700.6	28,819.2	76,996.6	56,729.0
Net income	917,186.6	386,840.8	392,692.9	462,534.3	208,402.0
Dividend paid [(a)]	401,762.0	401,920.8	366,612.8	352,647.0	350,324.3
Earnings per share *(in euros)*					
Earnings after tax, employee profit sharing and before amortization and depreciation and provisions	1.38	0.70	0.69	0.80	0.46
Net income	1.48	0.62	0.63	0.82	0.38
Dividend paid per share	0.65	0.65	0.65	0.65	0.65
Personnel					
Average workforce throughout the fiscal year	182	176	163	152	142
Payroll cost *(in thousands of euros)*	28,097.6	21,542.3	23,128.9	16,650.2	18,691.7
Amount paid for company benefits (social security and Pension Plan contributions, etc.) *(in thousands of euros)*	9,764.3	10,596.4	9,655.8	7,164.1	9,106.0

(a) Excluding treasury shares.

Realizable and available assets and liabilities falling due within one year

(in thousands of euros)	December 31, 2019	December 31, 2018
Realizable assets		
Fixed assets	**29,670.6**	**30,098.6**
Receivables related to equity interests	(173.2)	866.4
Other financial assets	29,843.8	29,232.2
Current assets	**1,231,354.3**	**943,390.2**
Trade and related receivables	38,307.2	36,398.2
Advances and down payments on orders in progress	29.9	26.6
Other receivables, including cash instruments	1,193,017.2	906,965.4
Cash and cash equivalents/Marketable securities	**612,058.2**	**850,620.6**
Total realizable assets	**1,873,083.1**	**1,824,109.4**
Current liabilities		
Financial debt	**1,388,569.9**	**1,736,113.3**
Bank borrowings and debts	1,128,417.0	1,441,834.1
Borrowings and miscellaneous financial debts [a]	260,152.9	294,279.2
Operating payables	**67,720.2**	**72,936.7**
Trade and related payables	11,856.9	13,616.1
Tax and employee-related debt	21,922.5	20,214.7
Debt on fixed assets and related accounts	10.1	11.1
Other payables, including cash instruments	33,930.7	39,094.8
Total current liabilities	**1,456,290.1**	**1,809,050.0**
Realizable assets – current liabilities	**416,793.0**	**15,059.4**
(a) Including bank overdrafts.	0.0	0.0

Maturity of trade payables and receivables (Art. D. 441-4 & L. 441-6-1)

In accordance with the provisions of Articles D. 441-4 and L. 441-6-1 (arising from the LME [French law on the modernization of the economy] No. 2008-776 of August 4, 2008) of the French Commercial Code, we hereby indicate the breakdown, in accordance with the provisions established by the Decree of March 20, 2017, of the maturity of trade payables and receivables, and present the invoices received and issued but which remain unpaid at the closing date of the fiscal year and whose term has expired:

Figures expressed in thousands of euros	Article D. 441 I.-1°: Invoices received but unpaid at the closing date of the fiscal year whose term has expired					Article D. 441 I.-2°: Invoices issued but not settled at the closing date of the fiscal year whose term has expired				
	1 to 30 days	31 to 60 days	61 to 90 days	91 days and over	Total (1 day and over)	1 to 30 days	31 to 60 days	61 to 90 days	91 days and over	Total (1 day and over)
(A) Late payment bands										
Number of invoices concerned	–	–	–	–	83	–	–	–	–	403
Total value of invoices concerned incl. tax	80.1	333.4	0.0	6.8	420.3	23,714.1	0.0	10,464.2	2,538.2	36,716.5
Percentage of total amount of purchases including tax for the fiscal year	0.2%	0.7%	0.0%	0.0%	0.9%	–	–	–	–	
Percentage of revenues incl. tax for the fiscal year	–	–	–	–	–	21.7%	0.0%	9.6%	2.3%	33.6%
(B) Invoices excluded from (A) relating to disputed or non-recognized debts and receivables										
Number of invoices excluded					None					None
Total value of invoices excluded					None					None
(C) Reference payment terms used (contractual or legal term – Article L. 441-6 or Article L. 443-1 of the French Commercial Code)										
Reference payment terms used for the calculation of late payments					Legal terms: 60 days net from the invoice date in accordance with the LME (French law on the modernization of the economy) of August 4, 2008					Legal terms: 60 days net from the invoice date in accordance with the LME (French law on the modernization of the economy) of August 4, 2008

As of December 31, 2019, 98% of trade receivables are intragroup receivables. Trade payables are primarily non-Group payables.

18.4 Statutory Auditors' Report on the Parent Company financial statements

This is a translation into English of the Statutory Auditors' Report on the Parent Company financial statements of the Company issued in French and it is provided solely for the convenience of English-speaking users. This Statutory Auditors' Report includes information required by European Regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the Management Report and other documents provided to the shareholders. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Year ended December 31, 2019

To the Annual General Meeting of SUEZ,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meetings, we have audited the accompanying financial statements of SUEZ for the year ended December 31, 2019.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at December 31, 2019 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2019 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

Valuation of equity securities and related receivables

RISK IDENTIFIED

As at December 31, 2019, the equity securities amount to M€ 9,161 for both gross and net values and are composed of SUEZ's interest in the companies SUEZ Groupe and ACEA. The related receivables to these securities amount to M€ 7,793 and exclusively concern SUEZ Groupe.

As indicated in Note "Accounting rules and methods – Fixed financial assets – Equity securities" to the financial statements, the equity securities book value, for which the Company is part of a sustainable holding logic, is brought back to its value in use if it is lower than the initial value. The value in use is assessed in particular by reference to the intrinsic value, to the yield value, to the expected cash flows, to the stock market prices and by taking into account any currency hedges.

As indicated in Note to the financial statements "Accounting rules and methods – Financial fixed assets – Receivables related to equity securities" to the financial statements, relating to the equity securities valuation, the related receivables are, if applicable, depreciated when the risk is higher than the value of the securities and that the securities have already been depreciated.

We considered that the valuation of equity securities and related receivables to be a key audit matter given both the significant importance in the Company's accounts and the judgment required to assess the value in use of the securities.

OUR RESPONSE

As part of our audit of the financial statements, our work consisted mainly in:

- obtaining an understanding of the valuations made by the Company of the methods used and of the underlying assumptions;
- examining the arithmetical accuracy of the values in use applied by SUEZ;
- assessing the value in use of SUEZ Groupe's securities and related receivables based on an implicit valuation;
- assessing the value in use of ACEA's securities compared to its market value.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French laws and regulations.

Information given in the Management Report and in the Other Documents with respect to the financial position and the financial statements Provided to the Shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents with respect to the financial position and the financial statements provided to the Shareholders.

We attest the fair presentation and the consistency with the financial statements of the information relating to payment deadlines mentioned in Article D. 441-4 of the French Commercial Code *(Code de commerce)*.

Information relating to Corporate Governance

We attest that the section of the management report devoted to Corporate Governance sets out the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code *(Code de commerce)*.

Concerning the information given in accordance with the requirements of Article L. 225-37-3 of the French Commercial Code *(Code de commerce)* relating to remunerations and benefits received or awarded by the directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from controlled companies that are included in the scope of consolidation. Based on this work, we attest the accuracy and fair presentation of this information.

With respect to the information relating to items that your Company considered likely to have an impact in the event of a public purchase offer or exchange, provided pursuant to Article L. 225-37-5 of the French Commercial Code *(Code de commerce)*, we have verified their compliance with the source documents communicated to us. Based on our work, we have no observations to make on this information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of the Shareholders and holders of the voting rights has been properly disclosed in the management report.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as statutory auditors of SUEZ by your Annual General Meeting held on July 15, 2008 for MAZARS and on December 21, 2007 for ERNST & YOUNG et Autres.

As at December 31, 2019, MAZARS was in the 12th year of total uninterrupted engagement and ERNST & YOUNG et Autres was in the 13th year of total uninterrupted engagement, which was the 12th year since securities of the Company were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Courbevoie and Paris-La Défense, February 26, 2020

The Statutory Auditors French original signed by

MAZARS		ERNST & YOUNG ET AUTRES
Achour Messas	Dominique Muller	Stéphane Pédron

18.5 Dividend distribution policy

In order to contribute to the responsible solidarity measures, which are in the nature of SUEZ, put in place by the Company, the Board of Directors calls on its shareholders to adopt, at the SUEZ Shareholders' Meeting ruling on the financial statements for the financial year ending December 31, 2019, a proposed dividend of EUR 0.45 per share, a decrease of almost a third compared to the previous financial year, *i.e.* a total amount of EUR 279.6 million[1]. Subject to approval by the Shareholders' Meeting, this dividend will be paid in cash in May 2020.

18.6 Legal and arbitration proceedings

18.6.1 Competition and industry concentration

No judgment was pronounced against the Group by a court or an authority in relation to competition during fiscal year 2019. In addition, the Group is aware of no proceedings pending before such court or authority likely to have or to have had, during the last twelve months, significant effects on the Group's financial position or profitability.

18.6.2 Litigation and arbitration

In the normal course of its business, the Group is involved in a certain number of litigation and arbitration with third parties or with the tax administrations of certain countries. Provisions are recorded for such litigation and arbitration when a legal, contractual or constructive obligation exists at the closing date with respect to a third party; it is probable that an outflow of resources without economic benefits will be necessary to settle the obligation; and the amount of the said outflow of resources can be estimated in a sufficiently reliable manner. Provisions recorded in respect of the above amounted to EUR 51.7 million as of December 31, 2019.

There is no other governmental, judicial, or arbitration proceedings of which the Group is aware of, that is suspended or with which it is threatened, likely to have or that has already had, in the past six months, a material impact on the Group's financial position or profitability.

Litigation in Argentina

In Argentina, tariffs applicable to public-service contracts were frozen by the Public Emergency and Exchange Regime Reform Law (Emergency Act) in January 2002, preventing the application of contractual price indexation that would apply in the event of a depreciation of the Argentine peso against the US dollar.

In 2003, SUEZ – now ENGIE – and its co-shareholders in the water concessions for Buenos Aires and Santa Fé filed arbitration proceedings against the Argentinean government, in its capacity as grantor, to enforce the concession agreements' contractual clauses with the International Center for the Settlement of Investment Disputes (ICSID), in accordance with the bilateral Franco-Argentinean investment protection treaties.

These ICSID arbitration proceedings aim at obtaining indemnities to compensate for the loss of value of the investments made since the start of the concession due to the measures adopted by the Argentinean government following the adoption of the abovementioned Emergency Act. The ICSID acknowledged its jurisdiction to rule on the two cases in 2006. At the same time as the ICSID proceedings, the concession-holders Aguas Argentinas and Aguas Provinciales de Santa Fé were forced to file proceedings to cancel their concession agreement with local governments.

However, since the financial situation of the concession-holding companies had deteriorated since the Emergency Act, Aguas Provinciales de Santa Fé announced that it was filing for judicial liquidation at its Shareholders' Meeting on January 13, 2006.

At the same time, Aguas Argentinas applied to file a Concurso Preventivo (similar to a French bankruptcy procedure). As part of these bankruptcy proceedings, a settlement proposal involving the novation of admissible Aguas Argentinas liabilities was approved by creditors and ratified by the bankruptcy court on April 11, 2008. The liabilities are in the process of being settled. The proposal provides for an initial payment of 20% (about USD 40 million) upon ratification and a second payment of 20% in the event of compensation by the Argentinean government. As controlling shareholders, ENGIE and Agbar decided to financially support Aguas Argentinas in making this first payment, upon ratification, and paid USD 6.1 million and USD 3.8 million respectively.

In two decisions dated July 30, 2010, the ICSID recognized the Argentine government's liability in canceling the Buenos Aires and Santa Fé water and wastewater treatment concession contracts. In addition, in June 2011 the ICSID appointed an expert to provide a definitive assessment of the compensation payable for the commercial harm. The reports on the Buenos Aires and Santa Fé concessions were presented by the expert to the ICSID respectively in September 2013 and in April 2014.

(1) Based on the total number of shares as of December 31, 2019.

Regarding the Buenos Aires concession, ICSID rendered its decision on April 9, 2015 ordering the Argentine Republic to pay Aguas Argentinas shareholders USD 405 million in damages (including USD 367 million to SUEZ and its subsidiaries). In early August 2015, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. The appeal was rejected on May 2017 making ICSID's decision final.

In April 2019, the Argentine government and the shareholders of Aguas Argentinas entered into and implemented a settlement agreement pursuant to the ICSID decision, for which SUEZ and its subsidiaries received a cash amount of EUR 224.1 million.

Concerning the Santa Fé concession, in a December 4, 2015 decision, ICSID ordered the Argentine Republic to pay USD 225 million to the shareholders of Aguas Provinciales de Santa Fé as a result of the termination of the concession agreement, and the entire amount was to go to SUEZ and its subsidiaries. In September 2016, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. This recourse was rejected on December 2018 making this decision irrevocable.

18.7 Significant change in the financial or business situation

Please see section 8.5.2 "Expected sources of financing", chapter 11 "Profit forecasts or estimates" and chapter 18.1, Note 24 "Subsequent events", of this Universal Registration Document.

19 Additional information

19.1 General information on share capital

19.1.1 Amount of share capital as of December 31, 2019

As of December 31, 2019, the Company's share capital amounted to EUR 2,485,450,316. It consisted of 621,362,579 shares with a par value of EUR 4 each. It has not changed compared to December 31, 2018.

The Company shares are fully subscribed and paid up, and all belong to the same class.

19.1.2 Non-equity instruments

None.

19.1.3 Shares held by the Company or on its behalf

This chapter contains information to be included in accordance with Article L. 225-211 of the French Commercial Code and to be disclosed in the description of the share buyback program pursuant to Article 241-2 of the French Financial Markets Authority *(Autorité des marchés financiers* – AMF) General regulations.

AUTHORIZATION FOR THE COMPANY TO PURCHASE ITS OWN SHARES (SHAREHOLDERS' MEETING OF MAY 14, 2019)

Resolution 17 of the Combined Shareholders' Meeting of May 14, 2019 (i) terminated the unused portion of the authorization granted to the Board of Directors by Resolution 16 of the Combined Shareholders' Meeting of May 17, 2018, and (ii) authorized the Company to trade in its own shares, and delegated full powers to the Board of Directors to implement this authorization, including the power to subdelegate, under the following terms and conditions and according to the following objectives:

Conditions:

- maximum authorized purchase price per share: EUR 25;
- maximum ownership: 10% of share capital;
- securities: shares traded on the Euronext Paris Stock Exchange.

Objectives:

- to ensure liquidity and promote the Company's shares on the secondary market through an investment service provider acting independently under a liquidity contract; or
- to subsequently cancel all or part of the shares thus purchased under the conditions set forth in Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be decided or authorized by the Shareholders' Meeting; or
- to implement the allocation or disposal of shares to employees or former employees and/or corporate officers or former corporate officers of the Company and/or companies affiliated with it or which will be affiliated with it, in France and/or outside France, as provided by Article L. 225-180 of the French Commercial Code, particularly in the context of any stock option plans, any bonus allocation of existing shares, any employee shareholding plans, or any compensation scheme applied by the Company, specifically under the relevant provisions of the French Commercial Code and/or French Labor Code, or French or foreign laws and regulations, and for any hedges set up for such transactions and related commitments of the Company, under the conditions approved by the market authorities and at the times that the Board of Directors or the person acting on behalf of the Board of Directors deems appropriate; or
- to hedge securities conferring entitlement to the Company's shares; said shares to be delivered at the time the rights attached to these securities conferring entitlement are exercised, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- more generally, to pursue any other goal that is or becomes authorized by law or regulations, or engage in any market practice that is or becomes approved by the financial market regulators, provided that the Company's shareholders are formally notified thereof *via* a press release.

On May 14, 2019, the Board of Directors subdelegated to the Chief Executive Officer the power to implement this authorization granted by the Shareholders' Meeting of the same date, in accordance with the objectives authorized by Resolution 17 of that meeting.

TRANSACTIONS DURING FISCAL YEAR 2019 AND BALANCE OF TREASURY SHARES AS OF DECEMBER 31, 2019

Under the liquidity contract

The Company entered into a liquidity contract with Rothschild & Cie Banque on August 9, 2010. Under this liquidity contract, in 2019 the Company acquired 5,433,558 shares for a total value of EUR 70.8 million, at an average share price of EUR 13.02, and sold 5,663,558 shares for a total value of EUR 73.7 million, at an average share price of EUR 13.02. As of December 31, 2019, the liquidity contract covered the following resources: 37,500 shares and EUR 29,659,168. The liquidity contract has terms that provide for its suspension or termination in the event of a takeover bid as defined by Article 5 of AMF decision No. 2018-01 (suspension in the event of a takeover bid) and in the event of a securities transaction affecting the Company's securities. As of the date of this document, the trading platform used to set up the liquidity contract is Euronext Paris.

Outside the liquidity contract

- the Company delivered 91,515 treasury shares to Group employees for the international contribution of the Sharing 2014 and Sharing 2017 shareholding plans.

Balance as of December 31, 2019

Number of shares	
Purchased	5,433,558 [a]
Sold	5,663,558 [b]
Transferred	91,515 [c]
Canceled	0
Average price *(in euros)*	
Purchase	13.02
Sale	13.02
Number of treasury shares held	3,213,435
Percentage of capital held	0.52%
Value of the portfolio [d] *(in euros)*	47,570,496

(a) All of the shares purchased during fiscal year 2019 were related to the liquidity contract set up by the Company.
(b) All of the shares sold during fiscal year 2019 were related to the liquidity contract set up by the Company.
(c) All the treasury shares used were transferred as part of the bonus share plans set up for the international contribution of the Sharing employee shareholding plans.
(d) Share value assessed at purchase price.

As of December 31, 2019, the Company held 3,213,435 shares, including 37,500 under the liquidity contract, amounting to 0.52% of the Company's share capital, with a market value of EUR 43.35 million (spot price as of December 31, 2019) and a purchase price of EUR 47.57 million.

TRANSACTIONS BETWEEN JANUARY 1 AND FEBRUARY 17, 2020

Between January 1, 2020 and February 17, 2020, the Company acquired 945,944 of its own shares in the amount of EUR 13.7 million, *i.e.* at an average price per share of EUR 14.43, under the sole liquidity contract. During the same period, the Company sold 983,444 of its own shares under the sole liquidity contract, for a total value of EUR 14.2 million at an average price per share of EUR 14.46, and delivered no treasury shares as part of the bonus share allocation plans. Lastly, on January 28, 2020, the Company canceled 2,970,050 treasury shares.

On February 17, 2020, the Company held 0.03% of its share capital, *i.e.* 205,885 shares (held for the objective of allocation to employees and corporate officers).

DESCRIPTION OF THE SHARE BUYBACK PROGRAM FOR SUBMISSION TO THE COMBINED SHAREHOLDERS' MEETING OF MAY 12, 2020

Pursuant to Articles 241-1 to 241-3 of the AMF General Regulation, the purpose of this section is to outline the objectives and conditions of the Company's share buyback program, to be submitted to the Combined Shareholders' Meeting of May 12, 2020.

19.1.3.1 Breakdown by objective of the shares held as of February 17, 2020

On February 17, 2020, the Company held 0.03% of its share capital, *i.e.* 205,885 shares, with all of the shares assigned to the objective of allocation to employees and Corporate Officers (including for hedging bonus shares).

19.1.3.2 Main characteristics of the program

The potential main characteristics of this program are described below:

- securities concerned: SUEZ shares (ISIN code: FR0010613471);
- maximum capital buyback percentage authorized by the Shareholders' Meeting: 10%;
- maximum number of shares that can be purchased based on the share capital as of January 28, 2020: 62,836,257 shares;
- maximum authorized purchase price per share: EUR 25.

19.1.3.3 Objectives of the share buyback program

The objectives pursued by the Company in connection with this share buyback program are set forth below:

- to ensure liquidity and promote the Company's shares on the secondary market through an investment service provider acting independently under a liquidity contract; or
- to subsequently cancel all or part of the shares thus purchased under the conditions set forth in Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be decided or authorized by the Shareholders' Meeting; or
- to proceed with the allocation or transfer of shares to employees or former employees and/or corporate officers or former corporate officers of the Company and/or companies affiliated with it or which will be affiliated with it, in France and/or outside France, as provided by Article L. 225-180 of the French Commercial Code, particularly in the context of any stock option plans, any bonus allocation of existing shares, any employee shareholding plans, or any compensation scheme applied by the Company, specifically under the relevant provisions of the French Commercial Code and/or French Labor Code, or French or foreign laws and regulations, and for any hedges set up for such transactions and related commitments of the Company, under the conditions approved by the market authorities and at the times that the

Board of Directors or the person acting on behalf of the Board of Directors deems appropriate; or

- to hedge securities conferring entitlement to the Company's shares, with said shares to be delivered at the time the rights attached to these securities conferring entitlement are exercised, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- more generally, to pursue any other goal that is or becomes authorized by law or regulations, or engage in any market practice that is or becomes approved by the financial market regulators, provided that the Company's shareholders are formally notified thereof *via* a press release.

19.1.3.4 Terms and conditions

A) MAXIMUM PORTION OF CAPITAL THAT MAY BE ACQUIRED AND HELD AND MAXIMUM AMOUNT PAYABLE BY THE COMPANY

The maximum portion of capital acquired and held by the Company may not exceed 10% of the Company's share capital, for a maximum total of EUR 1,570,906,425 based on the share capital as of January 28, 2020, consisting of 628,362,579 shares.

B) DURATION OF THE SHARE BUYBACK PROGRAM

Pursuant to the resolution to be proposed at the Shareholders' Meeting on May 12, 2020, the share buyback program may be implemented for 18 months from the date of the Shareholders' Meeting, *i.e.* until November 12, 2021.

19.1.4 Other equity instruments

On February 27, 2014, the Company issued 19,052,803 zero-coupon bonds convertible into and/or exchangeable for new and/or existing shares (known as "OCEANE" bonds in France) maturing on February 27, 2020, with a nominal amount of EUR 350 million. The nominal value of an OCEANE bond was set at EUR 18.37, representing an issue premium of 30% compared to the reference price of the SUEZ share.

With the exception of a limited number of OCEANE bonds that were the subject of a conversion request that resulted in the allocation of 18,724 existing shares, all of the OCEANE bonds were redeemed on February 27, 2020 at par value by a cash payment.

19.1.5 Authorizations and delegations of authority granted by the Shareholders' Meeting

See chapter 14.4 of this Universal Registration Document.

19.1.6 Options or agreements concerning the Company's share capital

None.

19.1.7 History of the share capital

Date	Type of transaction	Share capital before transaction *(in euros)*	Premium *(in euros)*	Shares issued/ canceled	Par value *(in euros)*	Cumulative number of shares	Share capital after transaction *(in euros)*
January 19, 2017	Capital increase [a]	2,257,604,984	N/A	1,176,328	4	565,577,574	2,262,310,296
March 28, 2017	Capital increase [b]	2,262,310,296	N/A	338,621	4	565,916,195	2,263,664,780
May 24, 2017	Capital increase [c]	2,263,664,780	560,126,577.20	47,468,354	4	613,384,549	2,453,538,196
December 19, 2017	Capital increase [d]	2,453,538,196	81,087,880	9,978,030	4	623,362,579	2,493,450,316
February 28, 2018	Capital reduction [e]	2,493,450,316	22,042,096.47	2,000,000	4	621,362,579	2,485,450,316
January 16, 2020	Capital increase [f]	2,485,450,316	74,706,100.36	9,970,050	4	631,332,629	2,525,330,516
January 28, 2020	Capital reduction [g]	2,525,330,516	N/A	2,970,050	4	628,362,579	2,513,450,316

(a) Capital increase due to the issue of new shares delivered after the vesting period to beneficiaries of the bonus share plan of January 17, 2013 outside of France, Italy and Spain.
(b) Capital increase due to the issue of new shares delivered after the vesting period to beneficiaries of the performance share plan of March 27, 2013 outside of France, Belgium and Spain.
(c) Issue of 47,468,354 new shares representing a capital increase of EUR 749,999,993.20 (EUR 189,873,416 of which in par value and EUR 560,126,577.20 in share premium), carried out as part of the financing to acquire GE Water & Process Technologies.
(d) Capital increase due to the subscription of 9,978,030 new shares as part of the SUEZ Group "Sharing 2017" employee share issue.
(e) Capital reduction due to the Company's cancellation of 2,000,000 treasury shares.
(f) Capital increase due to the subscription of 9,970,050 new shares as part of the SUEZ Group "Sharing 2019" employee share issue.
(g) Capital reduction due to the Company's cancellation of 2,970,050 treasury shares.

19.2 Memorandum of association and bylaws

The Company's bylaws are available on the Company website at www.suez.com.

19.2.1 Purpose of the Company and Trade and Company Register

The Company's purpose is set out in Article 3 of the Company bylaws.

The purposes of the Company are as follows, in all countries and by all means:

1. the provision, in any form whatsoever, of all services connected to the environment, and in particular:
   - all services for the production, transportation and distribution of water, for all domestic, industrial, agricultural or other needs and uses, on behalf of local public authorities or private individuals,
   - all wastewater treatment services, including the disposal of sludge of domestic, industrial, or other origin,
   - all services that may directly or indirectly concern the collection, sorting, treatment, recycling, incineration, and recovery of all types of waste, by-products and residues, and generally any activity or venture related to waste management,
   - the creation, acquisition, operation or divestment of all transport and road haulage services,
   - the creation, purchase, sale, leasing, rental, management, installation and operation of any facility relating to waste management, and
   - generally, all services on behalf of local public authorities, private entities and residential customers connected with the above;
2. on an ancillary basis, the production, distribution, transportation, utilization, management and development of energy in all its forms;
3. the study, setup and completion of all projects, services, and public or private works on behalf of any local public authorities, private entities or residential customers; the preparation and awarding of all contracts of any type whatsoever relating to those projects and works;
4. the acquisition of equity interests by obtaining shares, interests, bonds and other corporate securities, existing or to be created in the future, *via* subscription, purchase, contribution, exchange or any other means, and the capacity to dispose of such interests;
5. the acquisition, purchase, transfer and operation of any patent, trademark, model, patent license or process;
6. the granting of any guarantee, first-call guarantee and other surety to any Group company or entity in the course of their business, as well as the financing or refinancing of their activities;
7. the subscription of any borrowing or, more generally, utilization of any type of financing, specifically *via* the issue or, as the case may be, the subscription of debt securities or financial instruments, in order to finance or refinance the Company's business activity; and

8. more generally, all industrial, financial and commercial transactions and transactions involving movable assets or real estate that may be connected directly or indirectly to one of the purposes specified above or any other similar or connected purpose or a purpose that might benefit and develop the Company's business.

The Company is registered in the Trade and Company Register of Nanterre (France) under the number 433 466 570.

19.2.2 Rights, privileges and restrictions attached to shares

All of the Company's shares fall under the same category and have all the same rights. The rights attached to the Company's shares are detailed in Article 8 of the Company bylaws.

19.2.3 Provisions to delay, postpone or prevent a change of control of the Company

The bylaws contain no provisions likely to delay, postpone or prevent a change of control of the Company. Factors likely to have an impact in the event of a takeover bid are described in section 16.3.2 of the Universal Registration Document.

20 Significant contracts

The most significant contracts, other than contracts entered into in the normal course of business, are described in chapters 5 and 16 of this Universal Registration Document. These include the following contracts:

- Shareholders' Agreement signed between SUEZ Groupe SAS, SUEZ (Asia) Limited, Beauty Ocean Ltd and NWS Holdings Limited, relating to SUEZ NWS Limited (previously Sino French Holdings (Hong Kong) Limited (see section 5.3.3.2));
- Shareholders' Agreement entered into by SUEZ Groupe SAS, Cofely (the successor of Elyo), Fipar Holding and Al Wataniya in December 2004, related to Lydec (see section 5.3.3.3 (A));
- Agreement signed in June 2015 between Chongqing Suyu Business Development Company Limited (joint venture between SUEZ and New World Services) and Chongqing Water Assets Management Co. Ltd concerning the Derun Environment company for the purpose of creating a major player in the water and waste sector in China;
- Agreement signed in July 2016 between SUEZ and various companies belonging to Caltagirone's Group, related to their contribution of a 10.85% stake in the Company, ACEA, compensated by issuing 20 million new Company shares subject to a four-year lock-up period, *i.e.* until September 2020; and
- Shareholders' Agreement signed on September 22, 2017 between SUEZ, SUEZ Groupe SAS and Caisse de Dépôt et Placement du Québec, related to SUEZ Water Technologies and Solutions, a company integrating the industrial water assets of GE Water and SUEZ (see section 5.3.4).

21 Documents available to the public

21.1 Consultation of documents

Corporate documents relating to the Company are made available to shareholders in accordance with current legislation and may be consulted on the Company's website at the following address: https://www.suez.com, as well as at the Company's head office, Tour CB21, 16 place de l'Iris, 92040 Paris–La Défense Cedex, France, under applicable legal and regulatory conditions.

Reference Documents and Universal Registration Document filed with the AMF for 2017, 2018 and 2019, the interim financial reports, and quarterly financial information may be consulted on the Company's website (at https://www.suez.com under "Finance", "Financial publications").

In addition, the regulatory information set out in Article 221-1 of the AMF General Regulations may be consulted on the Company's website (at https://www.suez.com, under "Finance", "Analysts and investors", "Regulated information").

PERSON IN CHARGE OF INFORMATION

Julian Waldron
Senior Executive Vice-President Group in charge of Finance

Tour CB21, 16 place de l'Iris
92040 Paris–La Défense Cedex, France
+33 (0)1 58 81 20 00

21.2 Financial reporting calendar

Julian Waldron
Senior Executive Vice-President Group in charge of Finance

Mathilde Rodié
Head of Financial Communications

Telephone: + 33 (0)1 58 81 20 00
Address: Tour CB21 – 16 place de l'Iris
92040 Paris–La Défense Cedex, France

Website: http://www.suez.com

SCHEDULE OF FINANCIAL COMMUNICATION

Presentation of annual results: February 26, 2020
Results for the first quarter of 2020: April 30, 2020
Annual Shareholders' Meeting: May 12, 2020
Results for the first half of 2020: July 30, 2020
Results for the first nine months of 2020: October 28, 2020

G Glossary

Biological recovery	Method of treating organic waste by composting it or turning it into methane.
Biomechanical recovery	Process in which waste is treated by mechanically isolating certain parts and treating others biologically. Includes several types of mechanical and biological processes, which may be combined in several ways depending on the desired results. Enables the separation of different fractions contained in waste into potentially reusable fractions and/or which can be treated biologically.
BOT (Build-Operate-Transfer) Contract	Contract under which a private company is responsible for project financing and for the design, construction and operation of the site for a fixed period, after which the property is transferred to the co-contractor.
Composting	A biologic process consisting of the conversion and recycling of organic materials including sewage sludge and organic waste of biologic origin into compost, a product that is stable and rendered hygienic and is rich in humic acids that are used to enhance agricultural processes.
DB (Design-Build) Contract	A building contract for a system for delivering the finished product. The design and construction of the project are carried out by one and the same entity known as the design-builder or design-build-contractor.
DBO (Design-Build-Operate) Contract	Contract under which a private company is responsible for the design, construction and operation of a site.
EMAS – Environmental, Management and Audit System	Certificate based on ISO 14001 certification and an environmental declaration certified by European inspectors, approved by the European Commission and published.
End-of-Life Vehicle	An end-of-life vehicle is a vehicle transferred by its owner to a third party for destruction. The vehicles involved are private cars, vans and three-wheeled scooters.
Energy recovery	Use of combustible waste as a means of producing energy, by direct incineration with or without other combustible matter, or by any other process, but with heat recovery. Energy recovery consists in using the calorific energy of waste by burning it and recovering that energy in the form of heat or electricity. The process can be carried out at an incineration plant or a cement works.
Energy recovery units	Another name for energy-recovering incinerators.
EPC (Engineering, Procurement and Construction)	Turnkey contracts where contractors provide engineering, design and completion services for a project.
ISO 14001	International standard aimed at verifying a company's procedural organization and methods of the organizational units, as well as the efficient set-up of an environmental policy and related environmental objectives.
Leachate	Water that percolates through the waste stored in landfills and becomes bacteriologically and chemically charged. By extension, this term is also used for water that has come into contact with waste.

Membrane	A kind of filter or sieve that retains particles of different sizes depending on its type and the diameter of its holes.
Natura 2000 Zones	Aiming to conserve biological diversity and promote landscapes, the European Union has embarked, since 1992, on establishing a network of ecological zones known as Natura 2000, which preserve species and natural habitats while taking the human, economic, cultural and regional activities that exist in those zones into account.
O&M (Operation and Maintenance)	Type of contract where management is delegated for the operation and maintenance of facilities as well as for certain renewal projects, excluding investments for initial capital expenditure.
PFI – Private Finance Initiative	Financing mechanism which appeared in Great Britain in 1992, whereby a private company finances the design and construction of a project usually assigned to a public authority, and then ensures its management by signing a PPP contract.
PPP – Public-Private Partnership	Financing mechanism by which the local authority calls upon private service providers to finance and manage installations that provide or contribute to the provision of a public service.
Process water	Water used by industries for the operation of technical facilities or to manufacture products.
Public service contract	Public service contracts are a form of management contract under which a public entity entrusts management of a public service to a company for a fixed period. The company is paid directly by customers and finances all or part of the investments in plant renewal (leasing contract) and in new plants (concession). The terms of concession contracts are generally longer (10 to 30 years) than those of leasing contracts (10 to 20 years) in view of the need for the operator to amortize the newly built installation works.
RDF – Refuse-Derived Fuel	Solid fuel produced through sorting household waste to extract non-combustible materials and compact combustible materials.
Relevant revenues	Revenues generated by "relevant" activities. In fact, certain activities within the scope of financial consolidation may not be considered relevant for environmental reporting purposes due to their core activity. The financial holding company, and commercial, broking, trading, marketing and sales activities are not considered relevant.
Single stream	Type of waste collection system where recyclable waste is collected from users in a single stream, which is subsequently separated in recycling centers.
Skid	In membrane technology, a platform comprising a frame, potentially on rails, on which an installation assembly is placed. Enables access to a system which can be moved and transported immediately, without dismantling it.
Sludge	Residue obtained following the treatment of effluent. Sludge consists of water and dry material. Properties of sludge vary widely depending on their origin. They depend on the nature of the effluent and the type of treatment applied.
Soil amendment/ conditioning	Process aimed at improving the physical properties of soil by incorporating material which, without being a fertilizer, alters and improves the nature of the soil. Sand, clay, lime or organic material, are all conditioners.

Stadtwerke	Term of German origin used for a municipal company belonging to a German town, the purpose of which is to manage certain public services, particularly energy, water and transport.
Treatment plant sludge	All residues from the biological activity of microorganisms living in treatment plants and transforming the material carried by wastewater so that it can be extracted. They consist mainly of water, mineral salts and organic matter.
WEEE – Waste electrical and electronic equipment	Electrical and electronic equipment includes all devices or components operating on electric or electromagnetic current (whether powered by electrical outlets or by batteries). These include, for example, **household electrical goods or white products** (cooking appliances, refrigerators, heaters, vacuum cleaners, etc.); **audiovisual equipment or brown products** (radios, television sets, camcorders, video recorders, hi-fi equipment, etc.); and **office and computer equipment, or grey products** (computers, printers, scanners, telephones, etc.).

Note on methodology

Operating data	Most of the operating data contained in this document were calculated on the basis of a scope of consolidation that includes fully integrated companies.
Population served by collection activities	The population served by the Group's collection activities corresponds to the number of residents served by traditional collection, to which is added the number of residents served by selective collection (a conventional collection operation and a selective collection operation that serve the same individual can thus be added together). This involves estimates (the number of residents served by the Group's collection activities has not been counted).
Human Resources	The number of Group employees corresponds to the number of salaried employees in SUEZ and its fully consolidated subsidiaries. Employees of companies consolidated by proportional consolidation or the equity method (for example employees of Group subsidiaries in China or Mexico) are therefore not included in the total Group workforce on that basis; the employee counts mentioned for them are thus in addition to that total. As soon as a company enters into the scope of consolidation through full consolidation, 100% of its employee data is included, regardless of the percentage of share capital held.

Concordance table

This Universal Registration Document includes all the elements from the Management Report of the Company and of the Group for the year 2019, as required in particular by Articles L. 225-100, L. 232-1, L. 225-100-1, L. 225-102-1, L. 225-102-4 and L. 225-37 of the French Commercial Code (FCC). The Management Report was approved by the Board of Directors of the Company on February 25, 2020.

Mentions relating to the Management Report	Article	Universal Registration Document section
I. ACTIVITY OF THE COMPANY AND ITS SUBSIDIARIES AND/OR CONTROLLED COMPANIES, AND OUTLOOK		
Status and business of the Group	L. 232-1-II, L. 233-6 and L. 233-26 (FCC)	Chapter 5
Income from the Group's business: financial situation and performance indicators	L. 225-100-1, I-2 and L. 233-6 para. 2 (FCC)	Chapters 7, 18.1 and 18.3
Objective and exhaustive analysis of business development, the Company's income and financial situation and, specifically, its debt position in terms of business volume and complexity	L. 225-100-1, I-1, L. 232-1, L. 233-6 and L. 233-26 (FCC)	Chapters 5, 7, 8, 18.1 and 18.3
Analysis of key non-financial performance indicators relating to the Company's specific business and particularly information relating to environmental or employee issues	L. 225-100-1, I-2 (FCC)	Chapters 5.9 and 15
Foreseeable development of the Company's situation and future outlook	L. 232-1-II and L. 233-26 (FCC)	Sections 5.4.1, 5.4.4 and chapter 11
Important events occurring between the closing date of the fiscal year and publication of this document	L. 232-1-II and L. 233-26 (FCC)	Section 18.1.6, Note 24 and chapter 18.7
Main risks and uncertainties	L. 225-100-1, I-3 (FCC)	Chapter 3 (except section 3.1.1)
Price, credit, liquidity, cash flow risks: indication of the Company's exposure to these risks and indications of the Company's objectives and policy regarding the Company's management of financial risks	L. 225-100-1, I-6 (FCC)	Chapters 8.6, 8.7 and section 18.1.6, Note 14
Financial risks linked to climate change and the measures taken by the Company	L. 225-100-1, I-4 (FCC)	Sections 3.1.2 and 5.9.2.2
Internal control and Risk Management procedures implemented by the Company	L. 225-100-1, I-5 (FCC)	Chapter 3.3
Research and development activities	L. 232-1-II and L. 233-26 (FCC)	Section 5.4.3 and chapter 5.7
II. PRESENTATION AND INCLUSION OF THE FINANCIAL STATEMENTS IN THE MANAGEMENT REPORT		
Changes made to the presentation of the annual financial statements or the valuation methods selected	L. 123-17, L. 232-5 (FCC) and 120-2 GAP	Chapter 18.3
Amount of non-tax deductible expenses, total amount of sumptuary expenditures and the corresponding tax and reintegration into taxable income of certain general expenses by total number or expense category	Article 223 *quater* and 223 *quinquies* of the French General Tax Code (CGI)	Chapter 18.3
Income for the fiscal year and proposed allocation of that income	–	Section 18.1.6, Note 16.4 and chapter 18.5
Amount of dividends paid during the last three fiscal years	Article 243 bis CGI	Section 18.3.7
Maturity of trade payables	D. 441-4 (FCC)	Section 18.3.7
Amount of intercompany loans granted	L. 511-6, 3 *bis* of the French Monetary and Financial Code	Chapter 6.3
III. SUBSIDIARIES AND INTERESTS		
Status of interests acquired in companies whose headquarters are on French soil	L. 233-6 para. 1 (FCC)	Chapter 18.1, Note 25 and chapter 18.3
IV. SHAREHOLDING AND SHARE CAPITAL		
Name of the companies controlled and proportion of the share capital the latter hold in the Company (treasury shares)	L. 233-13 (FCC)	Chapters 16.1 and 19.1
Identity of individuals or corporate entities owning over 1/20, 1/10, 3/20, 1/5, 1/4, 1/3, 1/2, 2/3, 18/20 or 19/20 of the share capital or voting rights at Shareholders' Meetings	L. 233-13 (FCC)	Chapters 16.1, 16.2 and 16.3
Purchase and disposal of treasury shares	L. 225-211 (FCC)	Section 19.1.3

Mentions relating to the Management Report	Article	Universal Registration Document section
Employee profit-sharing in the share capital	L. 225-102 (FCC)	Chapters 15.3 and 16.1
Summary of transactions made by the Corporate Officers and their relatives during the year	L. 621-18-2 of the French Monetary and Financial Code and 223-26 of the AMF General Regulation	Chapter 16.5
Share disposals to adjust reciprocal shareholdings	R. 233-19 para. 2 (FCC)	N/A
Potential adjustments for equity instruments in the event of share buybacks or financial transactions	R. 228-90, R. 228-91 and R. 225-138 (FCC)	N/A
V. STOCK OPTIONS AND BONUS SHARE ALLOCATIONS		
Stock options and bonus share allocations	L. 225-185, L. 225-180, L. 225-184 and L. 225-197-1 (FCC)	Chapters 13.1, 15.3 and 18.1, Note 22
VI. COMPANY AND ENVIRONMENTAL INFORMATION		
Non-financial performance statement	L. 225-102-1, R. 225-105 and R. 225-105-1 (FCC)	Chapter 5.9
Vigilance Plan and its report	L. 225-102-4 (FCC)	Section 5.9.2.7.7
VII. BOARD OF DIRECTORS' REPORT ON CORPORATE GOVERNANCE	L. 225-37 para. 6 C. com	Chapter 14.4
VIII. MISCELLANEOUS INFORMATION		
Injunctions or financial sanctions for anti-competitive practices issued by the Anti-Trust Authority	L. 464-2-I para. 5 (FCC)	Chapter 18.6
IX. STATUTORY AUDITORS		
Mandates awarded to the Statutory Auditors	–	Chapter 2
X. DOCUMENTS TO BE ANNEXED TO THE MANAGEMENT REPORT AND/OR TO BE CIRCULATED TO SHAREHOLDERS		
Income statement for the last five fiscal years	R. 225-102 (FCC)	Chapter 18.3
Statutory Auditors' Report on the Parent Company financial statements including information on corporate governance	L. 225-35, L. 823-9, L. 823-10, L. 823-11, L. 823-12 and R. 823-7 (FCC)	Chapter 18.4
Statutory Auditors' Report on the Parent Company non-financial performance statement	R. 225-105-2 (FCC)	Section 5.9.7
Statutory Auditors' reasonable assurance report on a selection of consolidated information	–	Section 5.9.8
Inventory of marketable securities held in portfolios at the end of the fiscal year	–	Section 18.3.7, Notes 5 and 18

Notes

This document was printed by an Imprim'vert labeled printer on PEFC–certified paper.

Photo credits: © SUEZ / Denis Félix, © SUEZ / Francesco Toiati,
© photodechantier-ma / SUEZ, © Steve Morgan, © Dupont Cyrille, © Franck Dunouau

Design and production: Agence Marc Praquin

SUEZ

Limited company
with capital of EUR 2,513,450,316
Tour CB21 — 16, place de l'Iris
92040 Paris La Défense Cedex France
tel. +33 (0)1 58 81 20 00

433 466 570 R.C.S. NANTERRE

www.suez.com