# ESSEntial 苏伊士 SSEntial 亚洲快讯















# SUEZ participates in Singapore International Water Week in support of a sustainable water future

The Singapore International Water Week (SIWW) 2022 was successfully held from 17 to 21 April 2022 in Singapore, returning as a physical event since the outbreak of COVID-19 pandemic. As a founding sponsor, SUEZ has leveraged this global platform to unveil and launch the brand new AssetAdvanced™ solution, with 30 presentations and exchanges on topics including water security against dry weather and climate change, innovative and effective water management, smart and digital technologies and solutions, desalination, efficient network management, asset and revenue management, biofactory dynamics and wastewater treatment.



# **Contributions & Benefits**

38

SUEZ delegates from HQs & Asia

20+

meetings with clients

14

speeches in SIWW forums & conventions

16

on-booth presentations on water solutions

































# SUEZ wins multiple excellence awards in China's water industry

SUEZ was recognised as one of the Top 10 Most Influential Water Companies in China 2021 – a flagship annual award of China's water industry. This makes SUEZ the only foreign company to have received the award each year since the award was created 19 years ago. At the same time, three SUEZ joint ventures, Macao Water, Jiangsu Sino French and Chongqing Sino French, received the Most Socially Responsible Water Company in China designation for their exemplary performance and social impact. Among them, Macao Water and

Jiangsu Sino French have been recipients of this award for 10 consecutive years since its first edition in 2012.

Additionally, five of SUEZ's water treatment infrastructure projects in China were selected as case studies on best practices in the water industry, and the Tangjiatuo wastewater treatment plant in Chongqing was also recognised by the industry as a benchmark for sophisticated operation and management of wastewater treatment.



Over the past 50 years of our steady growth in China, SUEZ has built solid and amicable relations with governments and industrial partners. We have developed and offered our world-class technology, operational and managerial expertise, and innovative solutions for climate change mitigation and sustainable resource management to governments and industrial customers in China. We are incredibly proud and excited to witness the rapid and dynamic

growth of China's environmental industry, and I am confident that foreign companies will remain important contributors to China's sustainable development going forward. In 2022, SUEZ embarked on a new journey, one in which we have continued to prioritise business development, producing landmark solutions in water and waste management with local partners and maintaining our unwavering commitment to China's sustainable development.



Steve Clark
CEO of SUEZ Asia





Five of SUEZ's water treatment infrastructure projects in China were selected as case studies on best practices in the water industry.







Chongqing Tangjiatuo wastewater treatment plant was recognised by the industry as a benchmark for sophisticated operation and management of wastewater treatment.

Macao Water, Jiangsu Sino French and Chongqing Sino French have been awarded the 'Most Socially Responsible Water Company in China'.

SUEZ and Taizhou
New Energy Industrial Park
deepen cooperation in
Jiulong WWTP expansion project



The WWTP's treatment capacity will be increased from 10,000m³/day to 17,000m³/day





In 2018, SUEZ won a 30-year contract to provide municipal and industrial wastewater services to Taizhou New Energy Industrial Park. Owing to SUEZ's profound expertise in industrial wastewater services worldwide, the cooperation scope had expanded from drinking water services to wastewater treatment services.

In May this year, SUEZ has increased investment to expand the Jiulong WWTP, which is now operated by SUEZ, to enhance the Park's competitiveness. The Park is deemed as a pilot park in the new energy industry in Taizhou, focusing on photovoltaics, battery and new energy production equipment.

SUEZ's innovative industrial wastewater treatment technology applied in the expansion project



Different pre-treatment processes can be adopted to treat different types of industrial wastewater. In this way, SUEZ is able to provide stable and continuous wastewater treatment services to the Park;



Main effluent indicators (COD, ammonia nitrogen, total phosphorus) comply with the surface water Class IV quality standard, with fluoride concentration in effluent further reduced.

# SUEZ wins 5-year catalyst handing services contract in Shanghai Chemical Industry Park



Recently, SUEZ signed a 5-year contract with a significant industrial client in Shanghai Chemical Industry Park to provide them with catalyst handling services. The contract is effective from 8 July 2022. The long-term contract reflects the client's affirmation of SUEZ's services.

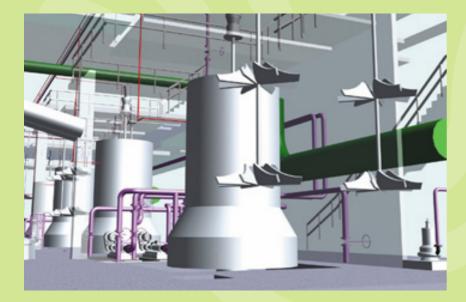
SUEZ has developed and has been providing industrial services in China's market since 2016, which include catalyst handling, high pressure cleaning, dry-ice cleaning and high-temperature cleaning. SUEZ has also developed a tailor-made solution to provide support for the client in handling BPA reactor spent catalyst, including operational know-how, process design and special equipment (vacuum pump, vent-gas treatment unit and scrubber tower).



#### **SUEZ's Industrial Services**

SUEZ provides tailor-made on-site waste management services as well as industrial services via its subsidiary, SUEZ (Shanghai) Environmental Management Company, to support operational continuity and safety for the industries and other businesses. Our industrial services include high pressure water jet cleaning, chemical cleaning, catalyst handling service, vacuum tanker service, pipeline pigging, video inspection and emergency spill response, among others.





## Zhuhai

SUEZ will provide Densadeg<sup>™</sup> system equipment and related technical services to Meixi Water Treatment Plant in Zhuhai to ensure the treated water meets Water Quality Standards for Fine Drinking Water (CJ94-2005). The project is designed with a treatment capacity of 150,000m<sup>3</sup>/day. The project marks the second cooperation between SUEZ and Zhuhai Water and Environment Holdings Group, a joint effort aimed at driving the infrastructure development in the Greater Bay Area.

# SUEZ wins two equipment supply and technical services contracts

## Ningbo

 $\mathsf{SUEZ}\ \mathsf{will}\ \mathsf{provide}\ \mathsf{Densadeg}^{\mathsf{TM}}\ \mathsf{system}\ \mathsf{in}\ \mathsf{the}\ \mathsf{tertiary}\ \mathsf{treatment}\ \mathsf{process}\ \mathsf{for}\ \mathsf{Jiangbei}$ District Underground Water Reclamation Plant.

The effluent will meet the highest standard for water reclamation plants in Zhejiang Province.



SS content < 10mg/l



The contract was signed with Zhongrong Investment & Construction Industry Co., Ltd.. It is a subsidiary of China Water Environment Group, a professional water environment technology platform and a leading company for water environment investment and operation services with strong investment capabilities. This marks the first-time cooperation between SUEZ and China Water Environment Group.





# Completion of Ha Giang WWTP construction project in Vietnam



Construction of the Ha Giang Wastewater Treatment Project in Vietnam was completed on 2 March 2022. SUEZ will carry out a trial operation before handing over the project to the client. The project commenced construction in 2017. Despite the COVID-19 pandemic in the last two years, SUEZ has managed to keep up with the construction progress, while ensuring the health and safety of its staff as well as reducing the risk of COVID-19 infection. Upon completion, the wastewater treatment plant will serve 45,000 residents in the Ha Giang Province with a daily treatment capacity of 3,000 m³/day, improving the local sanitation conditions and limiting impacts on the local water environment.







# An innovation initiative of cross-department cooperation for development in smart water business and technology

SUEZ's joint venture Smart Water Technology (Beijing) ('SSW'), which is engaged in smart and environmental solutions, and SUEZ's Water Operation Technical Management and Development Department in China ('TCPE') signed a cooperative agreement in June 2022 for innovative water technology development and cooperation in the following aspects. By making full use of both parties' advantages, it can accelerate SUEZ's development in smart water business and technology as well as further enhance the Group's competitiveness:

- With strong marketing capability, SSW promotes mature technical solutions in chemical dosage system, Power BI database and more. It also assists in improving products or solutions that are currently in trial run and are ready to be delivered on the market, for example the iAlert smart risk alerting system, LIMIS lab data management system, CMMS asset management system, etc.;
- TCPE and SSW join hands to develop new products, technologies and solutions. Al self-learning algorithms in new water technology is one of the priority fields of study in the near future;
- Mutual technical support to realise complementary advantages, thereby strengthening SUEZ's capability to undertake water projects in the market;
- Mutual exchanges on practices and know-how of water technology as well as regular professional trainings aimed at continuous improvement in professional competence of SUEZ's technical staff.



#### SUEZ JV Smart Water Technology (Beijing)

A joint venture between SUEZ and Silu Daji, which combines the advantage of SUEZ in smart water technology and the research support of Silu Daji from Tsinghua University. It tailor-makes smart services to clients and helps water companies optimise operation.

#### SUEZ's Water Operation Technical Management and Development Department in China

It provides technical management, technical support, innovative R & D for around 40 SUEZ's joint ventures in China to improve the water treatment process, asset management as well as health & safety and industrial risk





# SUEZ ASIA ESSENTIAL\_ISSUE 08

# PULSE 2022 staff survey results for Asia



Following the completion of takeover bid in January 2022, SUEZ underwent a series of restructuring efforts to be fully prepared for its brand new journey. One of the main tasks is the PULSE staff survey launched by the Group in April, with the aim of encouraging staff feedback for continual improvement so as to achieve the Group's growth target.



# $\gg 87.6\%$ participation rate

One of the regions with the highest participation rate at Group level, as compared to the average of 50%.



# 90% health & safety score

Deemed as the greatest strength in Asia at 90%, health & safety, still a top priority, will be taken seriously.



# 79% engagement score

In comparision with 70% average Group score and 63% external benchmark. More impressively, despite challenges brought by the COVID-19 pandemic over the past two years, the staff engagement in Asia shows a remarkable improvement from 68% in 2018, a strong indicator of confidence that we are moving in the right direction.



# significant improvements in customer focus and cooperation scores

There have been significant improvements in customer focus and cooperation scores as compared with those in 2018, both of which are key factors for SUEZ's success and must be further improved.

The survey results also show that more than one third of the responses believe technology is our biggest strength, followed by SUEZ history and engagement. On the other hand, internal process is the most-mentioned area for improvement. Details of the survey results will be analysed and relevant improvement actions will be taken to maintain a high level of staff engagement so as to achieve our development aspiration.



# SUEZ wins awards in Asia







The JV was named an 'Advanced Unit for Ecological Environment in 2021' and the 'Best Organiser of CSR activities in 2021'. The awards affirm the JV's outstanding performance in environment protection and CSR.



The Sino-Singapore SUEZ JV won the first national utility model patent since its inception in 2020. The patent is for an aerosol canister dismantling device, developed by the JV to pretreat aerosol canisters, in order to reduce the potential risk of explosion during incineration.



Sino-Singapore SUEZ wins the first



The JV won several H&S awards, including:

- third prize and 'Outstanding Organiser of Safety Month Activities Award' in a local safety contest;
- being selected as a reference case for health and safety management given its practice of keeping records of staff health information;
- being named an 'EHS Management Demonstration Enterprise' by the Park owing to its active participation in the Park's safety activities.

Suzhou SIP Sino French wins **H&S** awards



Chongging Excellence R&D Centre has been designated an 'Outstanding SME for Innovation' in Chongqing's selection round for 2022. The accolade entitles the Centre to a government subsidy to support progression of its innovation and research activities, as well as to further improve its competitiveness.

Chongqing Excellence R&D Centre innovation and research



Chongging Sino French Water revamped unused reactive power compensation devices, which now run automatically, and installed them in one of its WTPs. This helped improve energy performance by saving electricity and reducing the need for manual adjustment of the device. The revamp will be awarded an annual cash bonus of RMB65,000 from the local power supply entity.

**Chongging Sino French Water** revamps electrical appliances for optimal energy performance and



The JV was named 'Healthy Enterprise in Chongging' by the Chongging Municipal Health Commission for its efforts in protecting the health and safety of its staff. The JV will continue to conduct occupational H&S training for its staff, offer regular check-ups and foster a healthy corporate culture.

Chongging Changshou Sino French





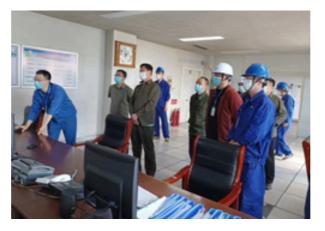
Felix Fan, Senior Vice President of SUEZ Asia, and Nacky Kuan, Executive Director of Macao Water, led a delegation to visit Professor Lee Hunwei, President of Macau University of Science and Technology, for in-depth exchanges on the development of scientific research cooperation in the field of water resources and water environment, with topics including artificial intelligence that help monitor water microbiology, microplastic pollution, extreme climate change impacts and others.



Sun Liankai, Deputy Director of Tianjin Public Security Bureau, led a delegation to visit Tianjin Jieyuan JV to inspect its water supply safety control measures. The delegation highly recognised its measures in place.



Jiang Qiaozhen, Vice Chairman of Qingdao Chinese People's Political Consultative Conference (CPPCC), Ma Yaoging, Director of Legislative Affairs Committee of Qingdao CPPCC, and Sun Wei, General Manager of Qingdao Water Group, led a delegation to Qingdao Sino French Hairun's Xianjiazhai WTP to learn about water treatment processes and taste direct drinking tap water.



Feng Haicang, Chairman of Baoding Sino French, visited the frontline staff for their first-hand account of challenges they faced when the city was locked down due to the COVID-19 pandemic.



Jin Ke, Chairman of Jiangsu Sino French Water, visited the JV's water plants, wastewater treatment plants and customer service centres to understand how they operated during the COVID-19 pandemic.



Zhang Ning, Deputy Director of the National People's Congress in Xi'an, led a delegation to visit the JV to understand its operations. Full affirmation was given to the wastewater treatment plant for its smart management and conducive working environment.

# SUEZ Asia Innovation Trophy 2021 Winning Projects

# **Asia Grand Innovation**

Long-Distance Transportation of High Solid Content Sludge in Changsha Sludge Drying Project Phase II

Treatment Infrastructure



The Changsha Municipal Sludge Drying Project Phase II, which was built by SUEZ, sends dry sludge to the nearby incineration plant where it is mixed with municipal waste for combustion to generate power.

The dry sludge needs to be transported over a long distance of 241 metres, with a height difference of 33 metres between the conveying port and the receiving port. The semisolid sludge has a solid content of 35% and a temperature of 60-70°C. It is extremely difficult to transport sludge with such characteristics over long distance and there are no reference cases in China.

To ensure smooth transportation of sludge, the project team has implemented a series of measures, including:

- use of a plunger pump with maximum outlet pressure of 150 bar;
- selection of proper pipes that are durable under high pressure and friction: SS316. DN250 and PN250;
- installation of heat preservation and electric tracing facilities in the stock bin and throughout the entire pipeline to ensure the fluidity of high-temperature dry sludge so it can pass through the pipework easily;
- placement of injection rings at different parts of the pipeline to inject water or polymer into the pipe to reduce friction between the sludge and the pipe wall;
- use of a plunger pump to pump water at different parts of the pipeline to wash away the sludge which is stuck in the pipe;
- increased efficiency through the use of sectional washing, with different washing points along the pipeline, such as the upstream drying facility, the spiral conveyor, the stock bin and the spiral exit of the plunger pump.

This is a preferred choice for long-distance sludge transportation, be it transportation of dewatered sludge from the the upstream wastewater treatment plant, or sludge transportation from the downstream drying plant to the incineration plant, which is both safe and highly efficient.





# **Best Innovation**Side Door Automation Project Recycling & Recovery - SCIP SITA



With the maturity of automation technology and communication technology, the construction of smart plants has become a hot spot. Smart and automated transformation can result in reduced costs and increased revenue. This project designs and installs a set of side door automatic feeding system to address the problem of low automation level in the side door area of the incineration line and to reduce labour force by:

- improving the efficiency of side door waste feeding, since the robot can quickly grab the matching customised pallet positioning, so that the working cycle of the feeding process is less than one minute, and it can work 24 hours a day;
- reducing the risk of CO emissions exceeding the standard in flue gas. By interlocking with the central control system, it reacts quickly and eliminates blind spots in automatic control;
- reducing labour intensity of operators;
- reduce the risk of operators' exposure to hazardous waste.



# **Best Promotion**

# Steam Condensate Comprehensive Utilisation Project Successfully Turns Waste into Treasure

Water Operations - Suzhou SIP Sino French



In the sludge drying project in the Suzhou Industry Park, steam condensate generated during the sludge drying process is sent and reused in the nearby power plant. However, the stricter standard for steam condensate reuse defines that the content of silicon dioxide should be reduced from 20µ g/l to 15µ g/l. The unqualified steam condensate is rejected by the power plant. The Suzhou Government has also issued a policy to shut down all small-scale coal-fired boilers. The JV seizes this market opportunity to sell the rejected steam condensate, thereby reducing the risk of thermal pollution due to the discharge of hot water which has been rejected by the power plant, as well as achieving water resource and energy reuse while increasing company revenue at the same time.

The project team has installed a 100 m³ thermal insulation water storage device, a high-temperature cooling tower and a pipeline smart switchover system that was designed based on the liquid level of the hot water box. The steam condensate can either be sold or be sent to the thermal power plant or be recycled and reused in the plant via the high-temperature cooling tower. The project has been successfully implemented and applied in sludge treatment projects in Yangzhou and Xiangcheng.

# Planting trees to build a green environment in support of carbon reduction

17 We Care





Staff from Xi'an Sino French and Suzhou SIP Sino French organised tree planting activities.

# Macao Water and Tsinghua University's School of Environment co-establish a student practice base







Macao Water and School of Environment, Tsinghua University, have co-established a student practice base on 1 March 2022. It is hoped that the industry-university collaborative platform will stimulate synergy innovation for the water sector.

# Co-building a harmonious community



# Committed to making contributions for the local community

An agreement was reached between SUEZ JV in SCIP and the local community for the JV to help clear waste and maintain a clean environment around its pumping station. Furthermore, the JV is committed to supporting the local community through organising a series of CSR activities, volunteer services and campaigns to promote water conservation.



# Providing volunteer services to local community

Chongqing Sino French Water's volunteers provided free consultation services to the local residents and introduced water pricing system, online payment, change of ownership, water quality enquiry and more.



#### Caring for stray animals

Macao Water staff visited the Society for the Protection of Animals (Macau) (ANIMA) to learn more about how to care for stray animals. Macao Water also donated 200 masks to ANIMA for a charity sale and the funds raised will be used to support the organisation's daily operation.



# Our environmental protection activities

# **World Water Day**



We raised awareness of water-saving practices among members of the community.



We organised various activities including a cleanup of the plant and raw water reservoir, putting up water-saving educational posters around the plant, and providing water-saving tips via radio broadcast.



We organised young staff members to clean up the Shang Lake - a raw water reservoir. This move was designed to promote water conservation practices to the public.

# **World Earth Day**



#### Macau

We organised a workshop to introduce United Nation's 17 sustainable development goals and share examples of SUEZ's own sustainability practices.



# Suzhou and Yangzhou

We cleared rubbish along riverbanks, as part of our commitment to environment protection.



# Chongqing

We cleaned up the trash around the reservoir and installed compost machines for food waste reuse.







#### **Singapore**

Over 30 staff from Southeast Asia and the management team of SUEZ Asia joined a 2-hour educational and hands-on session to clean the waterways in Singapore. The interconnected waterway network serves to channel rainwater into reservoirs. Facilitated by the Singapore Waterways Watch Society, a non-governmental and nonprofit environmental organisation, a total of 37 kg of waste was collected.

# **World Environment Day**









We launched the 'I promise' activity to encourage our staff to make a pledge to 10 concrete actions driving sustainable development and share the pledge photo on social media to inspire more people to act green.

Staff volunteers helped clean the hill trails and the sewage tunnels.

We organised a beach cleanup activity. Around 20 JV staff ioined the event.

An open day was held for our plants so that kids can learn more about water treatment facilities and engage in role-playing games.



SUEZ has been a firm supporter of continued learning and talent development for its staff so they can realise their full potential and achieve business growth. SUEZ strongly believes that talent is the key driver of business performance, a commitment which has been upheld despite the pandemic. To suit the current context of learning, we have launched GRIT (growth, resilience, innovation, talent) programme 2022, which is a combined mix of online courses, remote mentoring and coaching, as well as project teams and workshops. The programme, co-designed by SUEZ and CEIBS (Global Executive MBA), integrates the expertise and resources from international business schools. It aims to equip participants with a strong mindset and skillset that will ensure their success in the next stage of career development.



42 SUEZ Asia participants



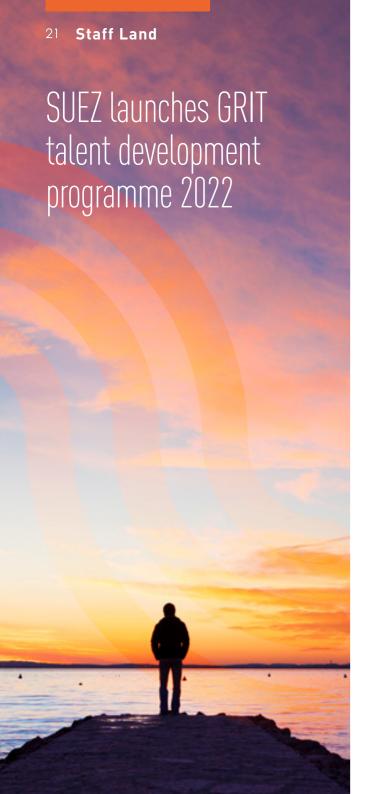
# Driving emerging talents to become future leaders of SUEZ

#### **Emerging Talents**

- High performance
- · High potential
- High learning ability
- SUEZ core values

#### **Future Leaders**

- Be willing to grow by challenging self and walking out of comfort zone
- Be able to quickly respond to change
- Be dared to make a difference with innovation
- Be able to achieve results with flexibility



SUEZ organises various activities to pay tribute to women on International Women's Day







#### **Asia**

A TEAMS meeting between SUEZ women network worldwide and SUEZ CEO Sabrina Soussan was held on International Women's Day to recognise the contributions made by SUEZ's female staff.

## Hong Kong & Singapore

Over 80 colleagues from Southeast Asia and Hong Kong gathered virtually on TEAMS and folded paper flowers to celebrate International Women's Day.







#### Macau

A female legislative council member was invited to share her views on gender diversity.

#### Shanghai

A workshop on 'Sustainable and Successful Career Development for Women' was organised.

## **Beijing**

A sharing session on women's rights was held.







# SUEZ H&S Week

SUEZ's H&S Week 2022 was held from 25 to 29 April 2022. The theme for this year is 'Work Equipment and Hazardous Machines'. Many offices and sites in Asia organised activities to enhance staff awareness of safety principles.

### Vietnam and the Philippines

Subcontractors working at construction sites learned safety tips about using tools and machinery.

## **Hong Kong**

Two wastewater treatment plants held safety talks emphasizing machinery safety.

## **Beijing**

A safety workshop and a safety knowledge quiz were held. Winners each won a gift branded with the 'Safety Always' logo.

## various other cities across China

35 water operation JVs across China held various trainings, meetings, exchanges and contests during H&S Week. The activities were strongly supported by our partners.















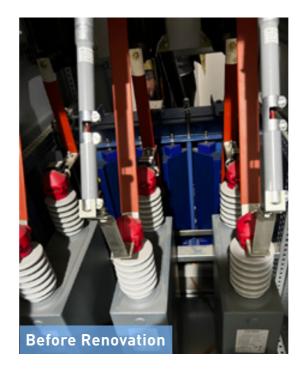


# Developing digital tool to standardise H&S evaluation

In 2021, supported by SUEZ corporate department, Qingdao Sino French Hairun developed a digital tool named 'Evaluation Master' to standardise evaluation for H&S and environmental risks. It has been promoted to other business lines within the Group in China, which enables all-rounded analysis of the potential risks and ensures that identified risks are timely and properly followed up. In addition, the staff are able to access the results as per their roles. It encourages staff involvement in H&S management.



# Chongqing Sino French Water installs partitions for capacitor switch boxes





Chongqing Sino French Water installed insulated partitions for the voltage capacitor switch boxes in the plant's pumping station. The insulated partitions prevent conductors from coming into contact with each other and causing flash hazards. The partitions significantly improve the safety of electricity consumption and ensure safe operation of the water plant.

# Ethics any questions, please send email to: ethics.asia@suez.com

# Relations with competitors

In the context of business activities, entities of the Group may be in contact with competitors. Although such contacts are not prohibited, special care must be taken into consideration in this respect. The Group's staff must act in strict conformity with the ethical principles of the Group and with competition laws.

They must therefore liaise with the legal department for details as to applicable regulations, which cover a wide range of behaviors and practices. Whether in the context of public procurement or private markets, entities of the Group cannot enter into any practices which, in any way, contravene the legal principles of fair, loyal, transparent and equal competition. The Group rejects all anti-competitive practices infringing applicable laws. Staff of the Group must also protect the confidentiality of information, i.e. both of information pertaining to the Group and of information lawfully exchanged with competitors when specific circumstances allow it.



# Latest events in Asia





# Essential 苏伊士 SSEntial 亚洲快讯















# 苏伊士参加新加坡国际水周 与同行携手共促水未来

2022 年新加坡国际水周于 4 月 17-21 日圆满举行,这是该国际性水业盛事自疫情 后首次恢复以线下形式举行。作为活动的始创赞助商,苏伊士携全新数字解决方案 AssetAdvanced™ 亮相、同时通过展览、30 场演讲和论坛环节、就应对于旱气候 的水安全、创新和弹性城市供水服务、智慧水务与智慧环境解决方案、海水淡化、 管网管理、资产绩效管理、污水处理等前沿议题与现场观众进行深入探讨. 以不同 的形式展示了苏伊士在水务领域的最新成果和创新技术。



# 参与及成果

38位

来自法国总部和亚洲 的苏伊士代表参与

水周论坛和主题演讲

14场

16场

20+场

客户会晤

展位上的水技术和 方案分享































# 苏伊士获颁多个中国水业大奖

苏伊士在每年一度备受关注的十大影响力企业评选中,获评"2021年度中国水业十大影响力企业"。这是自首届水业十大影响力企业评选以来,苏伊士连续19年作为唯一一家外资企业蝉联该奖项。同时,苏伊士旗下澳门自来水、江苏中法及重庆中法三家合作公司也以其在行业典范及社会效应等方面的出色表现,获得"中国水业最具社会责任服务企

业",其中澳门自来水及江苏中法自 2012 年第一届评选以来连续 10 年获得该奖项。

此外,苏伊士在中国的五个水务工程案例入选水业 企业最佳案例,在重庆的唐家沱污水处理厂作为污 水处理精细化运营管理标杆,也获得业界肯定。



苏伊士在中国稳健发展的近 50 年间,与各地政府、行业伙伴建立了稳定友好的合作关系,带来了全球先进的技术和运营管理经验,为各地政府和工业客户开发缓解气候变化和可持续的资源管理创新解决方案。如今看到中国环保行业的蓬勃快速发展,我们感到非常自豪和振奋。我相信,外资企业将继续

发挥中国可持续发展重要贡献者的作用。苏伊士于2022年开启了新征程,继续以业务发展为优先目标,与各地合作伙伴在水务和固废领域开发更多具有里程碑意义的解决方案,矢志不渝致力于中国的可持续发展。



苏伊士亚洲地区首席执行官
郭仕达





苏伊士在中国的五个水务工程案例入选水业企业最 佳案例。





澳门自来水、江苏中法及重庆中法获"中国水业最具社会责任服务企业"。

重庆唐家沱污水处理厂作为污水处理精细化运营管 理标杆,获业界肯定。 苏伊士与泰州 新能源产业园 扩大合作扩建 九龙污水处理

.7 万立方米 / 日

污水处理厂的处理规模将由每日 1 万立方米提升到 1.7 万立方米





凭借深厚的技术积淀和在各地工业园区的专业污水处理服务,2018年,苏伊士与泰州的合作在多 年饮用水供给的基础上扩大至污水处理领域,为泰州新能源产业园独家提供30年的优质市政和工 业污水处理服务。

2022年5月,苏伊士对园区正在运营的九龙污水处理厂项目增加投资并进行扩建,提升园区的配 套服务水平。泰州新能源产业园是泰州市重点培育的"新能源特色产业示范区",以光伏、储能(锂 电池)、新能源装备制造等为主导产业。

## 应用于扩建项目的苏伊士创新型工业污水处理工艺



针对性的预处理、灵活多变的切换可能性,使园区污水处理厂能够确保连续提供 接收和处理服务;



尾水主要排放指标(COD、氨氮、总磷)执行地表水 Ⅳ 类标准,氟化物排放浓 度进一步降低。

# 苏伊士获得五年期 催化剂处理服务合约



苏伊士与位于上海化学工业区的重要客户签订了一份为期五年的催化剂置换服 务合同、于2022年7月8日开始实施。此长期合同的签订反映了客户对苏伊士 服务的肯定。

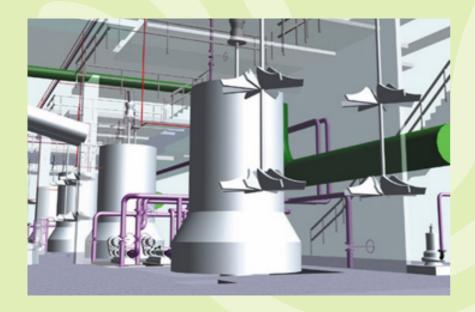
苏伊士自 2016 起开始在中国提供多种类型的工业服务,包括催化剂置换、高压 清洗、干冰清洗以及高温清洗等。苏伊士开发了一种专门处理 BPA 反应器废弃 催化剂的解决方案,包括操作技术、工艺设计以及专用设备(真空泵、排气处 理装置、洗涤塔等)。



## 苏伊士工业清洗服务

苏伊士因应化工行业及其他行业客户要求,量身定制就地的废弃物管理方 案,通过全资子公司苏伊士(上海)环境管理有限公司提供工业清洗等服务, 保证生产连续性和安全性。工业清洗服务项目包括高压水清洗、化学清洗、 催化剂置换、真空槽车服务、管道清洗、视频检测和紧急泄漏处置等。





苏伊士将为梅溪自来水厂提供 Densadeg<sup>™</sup> 高效沉淀池系统工艺设备供 货及相关技术服务, 使得出水水质将达到《饮用净水水质标准 CJ94-2005》的要求。工程处理规模为 15 万立方米 / 日。

这是苏伊士与珠海水务环境控股集团的第二度合作,双方携手推动粤港 澳大湾区的基建发展。

# 苏伊士获得两项设备供货 及技术服务合约

苏伊士提供 Densadeg<sup>™</sup> 高效沉淀池用于江北区下沉式再生水厂的深度处理工 艺、使出水水质达至浙江省同类再生水厂最高标准。





**总磷** ≤ 0.3 毫克 **/** 升

客户中蓉投建实业有限公司是中国水环境集团旗下专业的水环境科技平台,是 国内领先的综合水环境投资营运服务商。本项目是苏伊士和中国水环境集团的 首次合作。



# 越南河江省污水处理项目竣工



2022年3月2日, 苏伊士负责建造的越南河江省污水处理项目竣工, 在交付项目予客户之前苏伊士将负责项目的运营测试。

项目在 2017 年开始动土建设, 在新冠疫情影响下, 苏伊士项目团 队一方面竭力确保项目进度,另一方面保障了员工的健康安全,降 低新冠肺炎感染风险。该项目的污水处理能力为 3,000 立方米 / 日, 服务越南河江省 4.5 万居民、将改善当地的卫生环境、也减少对当 地水环境的影响。





# 开启跨业务部门合作创新模式加速智慧水务业务和技术发展

苏伊士在中国的水务运营技术与管理发展平台与苏伊士的智慧与环境解决方案业务合作公司 苏伊士智慧水务科技(北京)于 2022 年 6 月签订了合作协议,积极发挥各自的优势,就以下 领域开展合作及联合水务技术创新,加速苏伊士智慧水务业务和技术发展,增强企业竞争力:

- 充分利用苏伊士智慧水务科技的市场推广能力,助力推广集团内成熟的技术项目,如精准加药、精准曝气、BI可视化报表等;并协助完善正处于实践应用阶段的产品和解决方案,把之推出市场,如优化职安健管理的 iAlert 智能风险预警系统、LIMIS 实验室信息管理系统、CMMS 设备管理系统等;
- 利用双方技术人才资源的优势,共同研发新产品、技术和解决方案,利用 AI 自主学习算法研发新水务技术是其中一项计划重点发展的项目;
- 利用双方技术优势互补、相互支持、大大提升了苏伊士承接市场的水务项目的能力:
- 双方就水务技术的实践经验及专业知识进行互动分享,定期组织专业培训,持续提升苏伊士技术人员的能力。



#### 合作公司苏伊士智慧水务科技(北京)

由苏伊士和思路大吉组建的合作公司,结合了苏伊士在水务行业数字 解决方案方面的技术专长以及思路大吉在数字化专业知识方面基于清 华大学的学术背景优势,推出定制化的智慧服务,帮助水务公司优化 运营。

#### 苏伊士在中国的水务运营技术与管理发展平台

主要对苏伊士在中国约 40 家水务运营合作公司进行技术管理、提供技术支持和创新研发,以优化水处理工艺流程、资产管理以及职安健、工业风险管理。





# 2022年员工调查 亚洲区结果



2022年1月收购项目交割后,苏伊士采取了一系列重组业务的行动,为我们的 新征程做好准备。其中一项关键工作就是集团于4月份启动的PULSE员工调查, 旨在聆听员工的声音、让公司持续改进、以实现我们的增长目标。

### **》 87.6% 参与率**

集团参与率最高的地区之一、集团的平均参与率为50%。

### 90%健康与安全得分

健康与安全仍然被认为是亚洲最大的优势。我们将继续把职安健 视为重中之重,不容忽视。

### **79% 敬业度得分**

集团的平均得分为70%,外部基准为63%。值得注意的是、尽管 新冠肺炎疫情在过去两年带来了种种挑战、亚洲员工的敬业度从 2018年的 68% 明显提高。这是一个强有力的信号、证明了我们充 满信心,正朝着正确的方向前进。

### 以客为尊和合作共赢得分 **显著提高**

与 2018 年相比,以客为尊和合作共赢得分显著提高。这些都是 苏伊士成功的关键因素, 我们必须持续改进。

调查结果也反映了超过三分之一的参与者认为技术是我们最大的 优势,其次是苏伊士悠久的历史和员工敬业度。另一方面,大部 分人认为我们需要改进内部流程。对于这些调查结果我们将分析 细节, 采取相应的改善措施, 致力提高员工的敬业度, 以实现我 们的增长目标。

#### SUEZ ASIA ESSENTIAL\_ISSUE 08

# 苏伊士在亚洲地区获得多个奖项



合作公司获得长寿经济技术开发区管理委员会 授予 "2021年生态环境先进单位"和 "2021 年责任关怀最佳组织单位",充分肯定了合作 公司在环保及履行企业社会责任方面的表现。



合作公司自 2020 年投运以来获得首个国家知 识产权局证书授权。其自主研发的《气雾罐破 拆装置》对气雾罐进行预处理,减低直接焚烧 气雾罐发牛爆炸的安全风险。





合作公司获得的职安健奖项包括:

- 在区内的安全知识竞赛中获三等奖,并获"安 全月活动优秀组织奖":
- 因系统记录员工健康数据、被市卫健委作为 优秀企业推广案例:
- 因积极参与园区的职安健活动而被园区的职 业安全环保协会授予 "EHS 管理示范企业"。

苏州中法环境 获得多个职安健奖顶

重庆长寿中法 获环保及企业社会责任奖 重庆环保研发中心成功列入重庆市 2022 年中 小企业"专精特新"培育库,将获得政府专项 资助和培优管理,发展创新研发,持续提升企 业核心竞争力。



合作公司对闲置的供电无功补偿柜进行改造, 应用于两路水厂,实现电网的无功补偿随生产 负荷大小自动调节,提升供电绩效,节约能源, 同时代替了维修人员 24 小时监控电网及人手 调节装置的操作。此项目正向当地供电所申请 奖励,将获得每年 6.5 万元的奖金。



合作公司获重庆市卫健委授予"重庆市健康企业"称号,以表彰其推动员工职业健康所作出的努力。合作公司持续开展职业健康教育,落实员工一般体检和职业病体检,并积极营造企业健康文化。

重庆环保研发中心 获政府研发创新专项资助 重庆中法供水 改造电器优化供电绩效获政府奖金 重庆中法长寿 获评"健康企业"



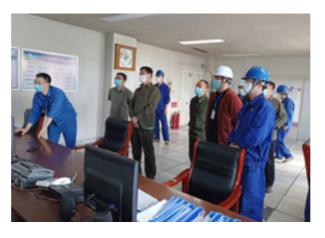


苏伊士亚洲地区高级副总裁范晓军以及澳门自来水执行董事关小冰一行拜访澳门科技大学校长李行伟教授。双方就开展水资源及水环境领域的校企科研合作进行深入的交流,课题包括水环境中微生物的人工智能识别与检测、水中微塑料带来的健康风险评估、海洋环境生物智能监测与识别、极端气候变化对环境的影响等。



天津市公安局副局长孙连凯一行到天津 中法芥园检查供水安全保障工作,满意 安全保障措施。

青岛市政协副主席姜巧珍、市政协法制委员会主任马耀青以及青岛水务集团总经理孙炜等一行参 观仙家寨水厂,了解深度处理净水工艺,并品尝 了直饮水。



保定中法董事长冯海仓到合作公司慰问因新冠疫 情封闭运行的一线职工,了解他们的工作和生活 情况。



江苏中法水务董事长金科到江苏中法辖下的水厂、污水处理厂和客服中心等了解疫情下的运行情况。



西安市人大副主任张宁带领代表团到访西安中法, 了解合作公司的运营情况,对污水处理厂智慧化管 理及厂区环境建设给予高度评价。

# 苏伊士亚洲 2021 年创新奖获奖项目分享



### 亚洲最高创新奖

长距离输送高含固率污泥方案:

长沙污泥干化项目二期

水务工程



由苏伊士负责建设的长沙市政污泥干化项目二期在污泥干化后送到邻近的焚烧炉掺杂生活垃圾焚烧发电。

最远泵送距离为 241 米,且输送□与接收□存在 33 米的高度差距。输送的污泥 为半固态,含固率约 35%,温度约为 60~70℃。远距离输送这样特性的污泥, 难度极高,国内并无参考案例。 为了顺利输送污泥,项目采取了一系列措施:

- 柱塞泵选用最大出口压力为 150 巴;
- 考虑了管道的承压和磨损,采用适当规格的输送管道: SS316、DN250 和 PN250;
- 为了确保高温污泥的流动性,使之更容易通过输送管道,经过污泥干化机后, 中间料仓设置保温及电伴热,且全线输送管道设置保温及电伴热;
- 管道分段设置注膜环,可注入水或者聚合物,降低污泥和管壁之间的阻力;
- 为有效处理污泥堵塞管道,导致无法运作,管道分段设置高压水冲洗点,采用柱塞泵原泵将水打入冲洗点,实现分段冲洗;
- 分段冲洗能让管道清洗更高效:柱塞泵上游的干化机、输送螺旋、中间料仓 以及柱塞泵的喂料螺旋出口均设置了冲洗点。

这是长距离输送污泥的优选方案,不管是上游污水处理厂产生的脱水污泥输送,还是下游处理单元输送污泥至焚烧厂,是既安全又高效的污泥输送方案。



### **最佳创新奖** 边门自动化项目

固废资源管理——上海化工升达



随着自动化技术、通信技术等成熟,智慧化工厂建设成为热点,通过智慧化、自动化转型,可以降低成本,增加收益。本项目针对焚烧线边门区域自动化程度低,人员劳动强度大的情况设计安装一套边门自动化上料系统,从而使边门区域操作达到:

- 提高边门废料进料效率,通过机器 人快速抓取配套定制托盘定位,使 上料过程工作节拍小于1分钟,且 全天候24小时工作;
- 降低烟气排放一氧化碳超标风险, 通过与中控系统连锁,快速反应, 消除自控盲区;
- 减少操作人员劳动强度:
- 减少操作人员接触危险废料的风险。



### 推广应用奖

### 蒸汽冷凝水变废为宝综合利用 完成华丽转身

水务运营——苏州中法



苏州工业园区污泥干化项目把蒸汽干化污泥后形成的冷凝水送回邻近的发电厂作为锅炉补给水循环利用。但随着环保要求提升,冷凝水中的二氧化硅含量需从20μ克/升下降至15μ克/升,一旦冷凝水不合格,便不能送往发电厂回收再用。此外,苏州市出台了政策淘汰小型燃煤锅炉供热水,合作公司可以在市场销售冷凝水,填补市场空缺,这样既避免热水被发电厂拒收后外排造成环境热污染,又可以把冷凝水出售,循环再用了水资源和热能,还增加了公司的收入。

项目组安装了一个 100 立方米的保温储水装置,新增一个高温冷却塔,依据热水箱的液位设计了管道智能切换系统,既可以把冷凝水外售,也可以送去热电厂或经高温冷却塔在厂内循环再用。项目已成功推广应用于扬州及相城污泥处理项目。





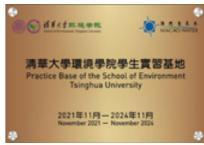


西安中法和苏州中法的员工进行植树活动。

# 澳门自来水与清华大学 环境学院携手共建 学生实习基地

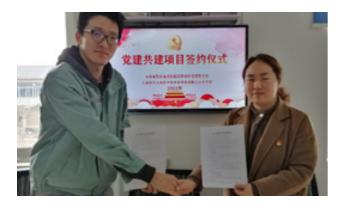






澳门自来水与北京清华大学环境学院共建的学生实习基地于 2022 年 3 月 1 日在澳门自来水正式挂牌,冀透过合作平台让学生参加企业运营的实践,激发创新,为供水行业带来创新思维。

# 共建和谐社区



#### 致力发展社区关系为社区建设贡献力量

上海化工中法与当地的一个社区签订协议、帮 助社区解决处理原水管线泵站附近的环境卫生 问题,并将承诺继续为社区提供公益活动、志 愿者服务和水资源知识科普等。



#### 社区义务服务活动

重庆中法供水的志愿者向社区居民宣传阶梯水 价、线上缴费、过户流程、水质查询等,并现 场提供便民服务。



#### 关注流浪动物

澳门自来水组织员工探访澳门爱护动物协会,了 解照顾流浪动物的工作。当日还向该协会赠送了 200 份口罩进行义卖,以筹募日常运营经费。



# 我们的环保活动

### 世界水日活动



#### 保定

我们组织节水宣传活动, 向市民宣传节约用水的 知识。



#### 塘沽

我们组织员工清洁水厂、 水库及周边的环境,并 在厂区内张贴节水教育 海报以及在公共电台进 行节水专题宣讲等。



#### 常熟

我们组织青年员工清理水源地——尚湖周边的垃圾,践行爱水、护水、惜水,呼吁公众加入保护水源地的行动中。

### 世界地球日活动



#### 澳门

我们举办世界地球日工作坊,介绍联合国 17 项可持续发展目标,并就苏伊士可持续发展战略在澳门自来水的应用进行了分享。



#### 苏州和扬州

我们组织员工清洁河岸 垃圾,用实际行动践行 绿色理念,保护水环境。



#### 重庆

我们组织员工清理饮用 水源地周边的垃圾并在 办公区域内设置堆肥 机,实现变废为肥,循 环利用。







#### 新加坡

苏伊士在东南亚的 30 多位员工及苏伊士亚洲管理人员在参加 2 小时的河道清洁。训后即着手进行河道清洁。此次活动是收集和清理新加坡连接水库的雨洪集水道上的垃圾。在新加坡河道检测协会这个非政府组织及非营利机构的帮助下,我们共收集了 37 公斤的河道垃圾。

### 世界环境日活动









#### 亚洲

我们组织"我承诺"的活动, 鼓励员工对推动可持续发展 的 10 项具体行动作出承诺, 并分享到社交媒体平台上, 以带动身边更多朋友关注可 持续发展。

#### 重庆唐家沱

我们组织员工清理山径和 沟渠。

#### 青岛

我们组织净滩活动,约 20 名合作公司员工参加了这 次活动。

#### 重庆和三亚

我们开放厂区让小朋友参 观水厂和进行职场体验, 培养环保意识。



苏伊士长期以来支持员工持续学习、推动人才发展,让他们充分利用潜能,实现业务增长。苏伊士坚信人才是推动增长和确保实现业绩的重要动力。在疫情的影响下,我们对这个承诺仍然矢志不渝。配合疫情下的新学习模式,我们推出的 2022 年 GRIT 人才发展计划(Growth 增长、Resilience 韧性、Innovation 创新、Talent 人才),将包括一系列的网上课程、导师远程指导、项目实践和工作坊等。课程由苏伊士和中欧国际工商学院合办,充分利用了双方的专业技术和资源,让参加者培养强大的意识和职场技巧,以在下一阶段的职业生涯中取得成功。



42 位 苏伊士亚洲员工参与



6 个月 学习旅程

#### 培育人才新秀成为苏伊士的未来领袖

#### 人才新秀

- 绩效高
- 潜力高
- 学习能力强
- 忠于苏伊士的核心价值观

#### 未来领袖

- 勇于挑战自我, 跳出舒适圈
- 能迅速适应改变
- 勇于开拓创新
- 能以各种弹性的手段实现业绩和目标

# 苏伊士在国际 妇女节组织多项 活动向女士表达 敬意

### 香港和新加坡

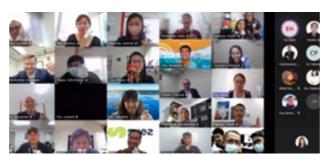
亚洲

超过80名苏伊士东南亚和香港的同事参加网络会议,一起折纸花庆祝国际妇女节。

苏伊士全球女员工网络与集团首席执行官苏冰岚进

行 TEAMS 视像会议, 褒奖苏伊士女同事的重要贡献。







#### 澳门

邀请女性立法会议员分享她对性别多元的想法。

#### 上海

组织"女性职业生涯持续发展和成功之道"工作坊。

#### 北京

组织"女性权利"分享会。













# 苏伊士安全周

4月25日至29日是苏伊士2022年安全周,今年的 主题是"劳动工具和危险设备的使用安全"。苏伊 士在亚洲的多个办公室和厂区都举办活动提升员工 安全意识。





#### 越南和菲律宾

我们向承建商介绍苏伊士建筑工地的安全规范以及 安全使用机器和工具的知识。





#### 香港

苏伊士的两个污水处理项目组织关于安全使用机器 的培训。



#### 北京

我们组织安全知识比赛,优胜者可以获得 "Safety Always"标徽的奖品。





#### 中国其他多个城市

位于不同城市的 35 个水务运营项目在合作伙伴的大 力支持下组织了多种多样的活动, 如安全培训、经 验分享以及知识竞赛等。

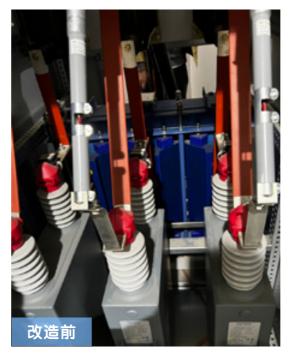


# 开发数字化工具 规范职安健审核

2021年、合作公司青岛中法海润在集团的支持 下开发"审核精灵"智能应用,以规范职安健和 环境工业风险审核过程, 对集团内业务类型的审 核结果进行全面分析、对风险进行评估, 确保审 核发现得到及时有效跟进。此外, 为促进全员参 与和建立鼓励分享的健康安全文化,不同角色的 人员都可以通过"审核精灵"获得与岗位有关的 审核汇总和分析信息。



# 合作公司重庆中法 为电容柜加装防护隔板





重庆中法对泵房的电容柜加装绝缘防护隔板。环氧树脂材质的防护隔板可以保护电容柜,避 免电气安全事故发生后、单一电路产生的电火花影响相邻设备及电路、大大提高了安全性、 为水厂安全运行提供了保障。



# 与竞争对手的关系

集团旗下单位在其业务活动中可能会与竞争对手发生联系。尽管这种联系本身并没有被禁止,但是必须特别注意这方面的问题。集团的员工必须严格遵守集团的道德准则和竞争法,也需要向法务部门了解适用于各种行为及实践的具体规定。

不论是在政府采购还是企业市场的环境下,集团旗下单位都不得以任何形式进行违反公平、忠诚、透明及平等竞争原则的任何行为。集团拒绝任何违反适用法律的反竞争行为。集团的员工还必须保障信息的保密性,既包括与集团相关的信息,也包括在特定环境允许的情况下,与竞争对手合法交流的信息。



# 苏伊士亚洲最新活动



