supporting the growth of industry in the era of the resource revolution
Population growth and urbanization, climate-change and the increasing scarcity of resources have sparked a worldwide demand for a growth model that consumes fewer resources.

- 41 mega-cities with more than 10 million inhabitants by 2030
- 269,000 tonnes of plastic waste floating on the ocean’s surface
- 2°C is the maximum allowable temperature increase over the next 80 years if we are to reduce GHG emissions by 40-70% by 2050
- 40% is the global shortage in water needs expected by 2030

Today, recycled materials meet 40% of global raw material demand. Worldwide, industry will account for 22% of all water consumption in 2030.

66% of global respondents say they’re willing to pay more for products and services that come from companies that are committed to positive social and environmental impact (Nielsen).

To address these challenges, we help industries redesign resource management and accompany them towards the circular economy as their preferred sustainable development partner.

The quantity of raw materials extracted from the planet has tripled in 40 years.
For industries, we provide tailored resource management solutions to help increase economic and environmental performance, and improve brand image. By:

- **Increasing competitiveness**
- **Meeting regulations**
- **Boosting brand equity through corporate social responsibility**
- **Developing circular solutions**

Our wide range of experience with industrial customers enables us to apply key learnings and innovations for continuous improvement to address long-standing challenges faced by each industrial sector.

- **Oil & gas** (exploration and production) — Shell, Total, BP
- **Feed & beverage** — Coca-Cola, Barilla, Heineken, Nestlé, Unilever, Campbell, Pepsi
- **Construction, decommissioning & materials** — Breyer, Saint Gobain, Dow, Henkel
- **Pulp & paper** — Sappi, Metsä Group, Metsä Fibre, Smart Kappa, CMPC
- **Car industry** — Ford, Nissan, Peugeot Citroën, Renault
- **Chemical & pharmaceutical** — AkzoNobel, BASF, Chemours, DuPont, Pfizer, Evonik, Gampel, Sandoz, Merck
- **Power** — Arak, EDF, Innova, Engie, Berkshire, Iberdrola, EDP, Delta Electricity
- **Mining & metals** — ArcelorMittal, BHP, Norilsk Nickel, Glencore, Rio Tinto, Anglo American, Glencore
- **Microelectronics** — Philips, ST Microelectronics, TSMC
- **Aerospace** — Airbus, Safran, ST Microelectronics, Saab, Boeing

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**For industries, we help industries increase resource recovery, turning their waste streams into new and accessible resources.**

We support industries and businesses in the optimization of their economic performance. We help them secure productive continuity and assets for operations, improve operational efficiency, minimize risk and downstream impact while increasing resource recovery and asset protection.

- **Meeting regulations**
  - Faced with changes in regulatory requirements and higher expectations from end users, industries are turning to our experts to help them overcome challenges and meet demands.

**Boosting brand equity through corporate social responsibility**

We help industries increase resource recovery, turning their waste streams into new and accessible resources. For industries, meeting environmental goals provides a source of value for their brand and products. We can help industries meet their goals by optimizing and protecting water resources, turning waste into new byproducts, improving energy efficiency, and reducing greenhouse gas emissions.

- **Chemical & pharmaceutical**
- **Power**
- **Mining & metals**

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**Developing circular solutions**

Our wide range of experience with industrial customers enables us to apply key learnings and innovations for continuous improvement to address long-standing challenges faced by each industrial sector.
Our unique integrated offering covers a broad portfolio of advanced technologies, innovative solutions, and digital services to help you improve competitiveness, enable sustainable management of resources, and conform with regulations.

creating value through the complete water, process, and waste cycle

access to integrated or specific solutions

- Consulting and impact studies
- Engineering and procurement
- Project management
- Chemical, water, and process treatment technologies and services
- Matrix solutions
- Services, operations, and maintenance
- Industrial maintenance and cleaning services

optimize & protect water resources

- Water resource management
- Process water treatment, supply, reuse
- Wastewater (collection, treatment, effluent treatment, reuse)
- Bridge to by-products recovery

turn waste into new resources

- Industrial waste (collection, sorting, transformation)
- Tables of recovered resources (secondary raw materials)
- Biological, recovery and composting
- Hazardous waste treatment
- Soil remediation, decontamination and site rehabilitation

improve energy resources

- Energy recovery from water and waste
- Supply of renewable energy (electricity, heat, and steam)
- Energy efficiency of the environmental facilities
- Reduction of GHG emissions

2,200 wastewater treatment plants built for industrial customers
10 hazardous waste incineration units
1.5 million tonnes of soil decontaminated in 2017
350 secondary raw material (SRM) production sites

providing state-of-the-art digital and smart solutions

Digital technology offers new opportunities to address the environmental and process challenges our customers face. SUEZ innovates to support them in this approach and boost asset performance.

Our broad digital solutions include:

data intelligence for asset performance

Using software as a service, we help our customers create efficiencies and optimize processes and water management through the use of software, data, and analytics.

digital waste management

We develop innovative digital solutions to enable our customers to trace their hazardous waste, boost recycling, reduce greenhouse gas emissions, optimize energy consumption, and adopt high-potential renewable energies.

Pleco®

Pleco® is an innovative tool that simplifies the administrative management of hazardous waste. Accessible via the web, this external allows our customers to manage their waste in real-time. Pleco® offers multiple functionalities such as the dematerialization of administrative procedures and the reporting of treated waste. Therefore, Pleco® means time and efficiency for our customers.

InSight™

InSight® is a cloud-based Asset Performance Management solution that uses data and analytics to help ensure water treatment assets operate at optimal performance. It connects key plant assets – like boilers, cooling towers, condensers, reverse osmosis membranes, and tanks – into one platform, which provides real-time visibility at an asset, plant or enterprise-wide level.

Batirim®

Batirim® is the first digital solution for the selection of construction materials. This solution qualifies, quicks and prices the lives of products and materials from building being removed, remanufactured or decommissioned and assesses their potential for reuse and recycling before the waste even exits. The drawings of the buildings are integrated in a 2D or 3D digital interface and saved on a touch screen tablet.

Organix®

Organix® is the 1st digital marketplace for organic waste. The platform connects producers of organic waste and movements or operators, who transform this raw resource into energy.

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serving all industries across the world

L’Oréal

SUEZ and L’Oréal, world is number one in beauty products, signed a global contract covering all of L’Oréal’s industrial, administrative and research centers in France and the world. The agreement aims to:

- achieve a neutral or positive “water footprint” for some of L’Oréal’s sites, particularly by optimizing water management, its treatment, and reuse, and thereby protecting water resources,
- help improve the renewable energy mix, beat and reduce the number of “carbon footprint” at L’Oréal by reusing, recycling, monitoring, and optimizing energy consumption,
- optimize water and waste treatment systems and units increasing waste reuse and recycling, by boosting material recovery at all of L’Oréal’s sites.

Recyclables

SUEZ and Mexens established RECYCLABLES, which quickly became the leading recycler of cables and non-ferrous metals in France. Under the oversight of SUEZ, RECYCLABLES handles all categories of cables, from collection and recovery of end-of-life cables to cable production waste. Each year, RECYCLABLES processes 10,000 tonnes of cables, from which it generates 18,000 tonnes of metal granules and 13,800 tonnes of plastics. The combination of leading-edge technologies enables the generation of 99.9% pure copper granules.

Delta Electricity

In Holten, the Netherlands, SUEZ operates a wastewater recycling plant to treat a Delta Electricity power station, reusing its water and environmental footprint. Since 2008, the plant has been reusing treated water from the nearby Maasneerde Park municipal wastewater treatment plant. In 2014, it was one of the first to use SUEZ’s finely divided iron (FDI) treatment to increase the load on its sludge treatment plant and save 256 million litres of water per year against 239 million previously.

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Nespresso

At the end of 2017, Nespresso decided to extend the recycling of its coffee capsules to the Moroccan market, where demand for waste treatment is increasing. Due to its exponential recycling, used coffee capsules in France, Nespresso called SUEZ, to improve the end-of-life of its coffee capsules in Morocco.

To simplify collection and encourage recycling, in Morocco’s main cities, Nespresso gives free of charge a recycled plastic bag to consumers, such as hotels, cafés, restaurants, and Nespresso Club Members, in which they can deposit the consumed capsules. The bag of collected used coffee capsules is transported to SUEZ recycling and recovery platforms located in Bouches-du-Rhône. At SUEZ platform, the coffee grounds and the aluminum that comprise the capsules are separated for recovery. This organic matter of the coffee grounds is given to the association Terra & Humanitatis, which campaigns for the conservation of agro-ecology restoration of local resources. The coffee grounds are transformed into compost and fertilizers which are then used to improve soil quality. The aluminum is reintegrated into the necessary recovery streams.

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produce pure copper granules out of cable waste

environmental performance and resource management
Between 1996 and 1992, Avenue Coking Works in Cheshunt produced about 1,400 tonnes of coke and 765,830 m³ of manufactured gas per day. The industrial waste was abandoned on this site for several decades, making it one of the most polluted sites in Western Europe. At the request of the state KEA (Homes & Communities Agency), SUEZ took up the challenge of rehabilitation, turning a seriously polluted land into the former coking works resting fully on its natural state. During the works, to keep environmental impact at a minimum, SUEZ uses in-situ techniques. SUEZ reports designed and operated a unique on-site solution. The final site was decontaminated, between 2011 and 2017, more than 400,000 tonnes of soil and highly contaminated soil were removed.

Shanghai Chemical Industry Park (SCIP)*

In China, environmental issues are governed by increasingly strict regulations. The challenge for Shanghai Chemical Industry Park, the fourth largest of its kind in the world, is to be competitive, attractive and durable, while respecting the environment and residents. The challenge was taken up by SUEZ, which is responsible for treating industrial waste, supplying drinking and industrial water, and treating and recovering hazardous waste.

- 173,895 tonnes of hazardous waste treated safely annually.
- 56,000 m³ of wastewater, from a wide variety of highly polluted effluents, treated every day.
- 818,900 m³ of technical water treated annually through recycling ³ Zane-Libelab, largest wastewater project of its kind to treat industrial waste and first ever in an industrial park in China.

*SCIPE: SUEZ, Zewetto, Siegert, Miroad, CEPASA, HOSTA, ENSO...

Avenue Coking Works

reconciling economic growth and environmental protection

delivering a restored landscape to the local community

ensuring production continuity and optimizing resources

requiring new water sources

Co-op Refinery Complex (CRC)

SUEZ was called to help Federation Co-operatives Limited’s Co-op Refinery Complex (CRC) in its production expansion project focusing on sustainability and environmental stewardship. SUEZ tested design, build, and commission a five-stage system of SUEZ’s unique wastewater treatment plant that enables the recycling and reuse of 2 million gallons of wastewater a day. In addition, SUEZ provides help to optimize the performance of water treatment assets and monitor the long-term health of the bioremediation microbes. In 2011, the CRC’s Wastewater Treatment Project was named Industrial Water Project of the Year by Global Water Intelligence (GWI). The award recognized the SUEZ project as the year’s most impressive technical and environmental achievement in the field of industrial water.

Smurfit Kappa

For SINEF, KAPPA, world leader in the production of packaging, the availability of its production machines alongside the sustainability of its raw materials and waste is essential for the uninterrupted and secure production of paper products. SUEZ signed in 2019 a dedicated management contract for a 3-year term, to support SINEF KAPPA in its continuous production of paper at its Bages factory in France.

SUEZ’s role had three components: • manage the supply of raw materials, delivering recycled paper from its sorting centre to paper production plants; • regular full cleaning of truck lines, and management of solid and liquid waste generated by the site; • full exhaust management.

creating new water resources

new water sources
SUEZ profile & key figures

We help cities and industries optimize water management, recycling and waste recovery

88,576 employees
5 continents
over 450,000 industrial and business customers
160 years of history serving human progress

environment, health, safety and quality: a constant priority

Our EHSQ policy is based on a continuous improvement approach, and we are certified ISO 14001, OHSAS 18001, Mase, VCA, OSH 18011, ISO 50001 and ISO 26000. Site performance is monitored through high-performance safety indicators. Our proactive management system includes site audits, procedures and training adapted to our activities and site specifications.

innovation & sustainable development is at the core of our DNA

SUEZ is recognized worldwide for its diverse portfolio of innovative skills. Each year, more than 45 research programmes contribute to expanding our offer and help industries become leaders in environmental performance within their sectors.

Concerning sustainable development, SUEZ is ranked "Best in Class" by several highly respected extra-financial rating agencies as Vigeo Eiris, Ecomotive and CDP. SUEZ is also a member of the Dow Jones Sustainability Index that rewards the top 10% of the best-performing companies in their sector in terms of social and environmental responsibility.

17 research centers worldwide
650 experts and researchers driving innovation