THE POSITIVE IMPACT MAGAZINE

PLUS

suez

In this issue, I enjoyed...

Sabrina Soussan
Chairwoman & CEO

I enjoyed reading about these international challenges where our expertise comes into its own and plays its small part in changing the world.

I liked the idea that our different strands of know-how and their positive impact will help transform an automotive industry that is reinventing itself.

I enjoyed seeing the priority topic of health and safety put into perspective. When zero becomes a mark of excellence, the entire company comes out on top.

AN EVER-LIGHTER MARK

Taking action for the green transition is sometimes akin to being a feather in a gale, but it can also entail creating auspicious currents and positive momentum in the suburbs, Asia or southern Africa. Here are some examples.

In the Paris region, we create green mobility from household waste.
In Taiwan, we reduce water stress by cleaning the sea, and without encroaching on land.
In South Africa, we protect waste reclaimers from insidious and long-neglected risks.

All around the world, we act and react. With an ambition that occasionally becomes an obsession: to have a useful and beneficial impact.

We drive mobility with waste

Twelve kilometres outside Paris, SUEZ is overseeing the construction of the world's largest hydrogen production and distribution unit directly connected to a waste-to-energy plant. The future facility will generate one tonne a day of this gas of the future, produced from the energy conversion of household waste through water electrolysis. This collective project will prevent the emission of around 1,500 tonnes of CO_2 equivalent per year, which equates to 200 car trips around the world.

In Créteil, we are going to build France's first hydrogen production and distribution plant linked directly to a waste-to-energy plant. This project calls on SUEZ's recognised expertise, fuelled by the goal of having a positive impact on the environment. The unit will be connected to the waste-to-energy plant belonging to the Val-de-Marne urban household waste authority (SMITDUVM), already operated by SUEZ. **The future facility will use green electricity produced from the incineration of household waste from 19 municipalities in the *département*.** SUEZ will supply the water needed to produce hydrogen, and will provide the land on which the new plant will be erected. The station will be built and operated by H2 Créteil, a company jointly owned by SUEZ, SIPEnR (a subsidiary of SIPPEREC[1]) and Banque des Territoires. The laying of the foundation stone on 10 June 2024 kicked off a major project that has since continued at a brisk pace. Fourteen months down the line, the station will provide a renewable energy solution for everyone involved in green mobility in the Paris region.

How do we produce renewable hydrogen by water electrolysis?

This technique is one of SUEZ's major areas of expertise. Electrolysis is a process that uses an electric current to separate water molecules (H_2O) into hydrogen (H_2) and oxygen (O_2). **The hydrogen produced is captured, stored and can be used as a clean, renewable fuel to reduce CO_2 emissions.** This process contributes to a circular economy by recovering waste and producing energy from local resources.

A tangible, innovative and ambitious solution in support of energy transition

The renewable hydrogen produced and distributed at the H2 Créteil facility will supply local authorities' heavy-duty vehicle fleets. As soon as it becomes operational, **the station will supply hydrogen to all the buses running on an Île-de-France Mobilités line operated by RATP.** In the longer term, it will also be able to fuel dustbin trucks from Grand Paris Sud-Est Avenir[2] and neighbouring communities. Another significant added value will be that private light vehicles will also be able to use the station.

This plant will be one of the very first to locally produce **hydrogen from renewable sources at a price as competitive as that of diesel.** By 2025, the plant will avoid the emission of around 1,500 tonnes of CO_2 equivalent per year. In time, H2 Créteil should double its output, producing two tonnes of hydrogen every day.

"Hydrogen is one of the keys to the energy transition. By replacing fossil fuels, this energy will make it possible to power vehicles without emitting greenhouse gases and without polluting the air we breathe," comments Laurent Cathala, chairman of Grand Paris Sud-Est Avenir and mayor of Créteil. This enthusiasm serves as a form of validation of SUEZ's commitment to enabling our clients to create value throughout the waste life cycle.

The construction of this major facility is supported and financed by ADEME[3], the Île-de-France Regional Council and the European Commission. It is a precursor to new projects that will be part of the French hydrogen plan. The plan aims to devote seven billion euros by 2030 to the development of this energy of the future, to improve air quality, combat global warming and create jobs throughout the region.

[1] Joint authority for energy and communication networks for Outer Paris.
[2] A community comprising 16 municipalities to the south-east of Paris.
[3] French Environment and Energy Efficiency Agency.

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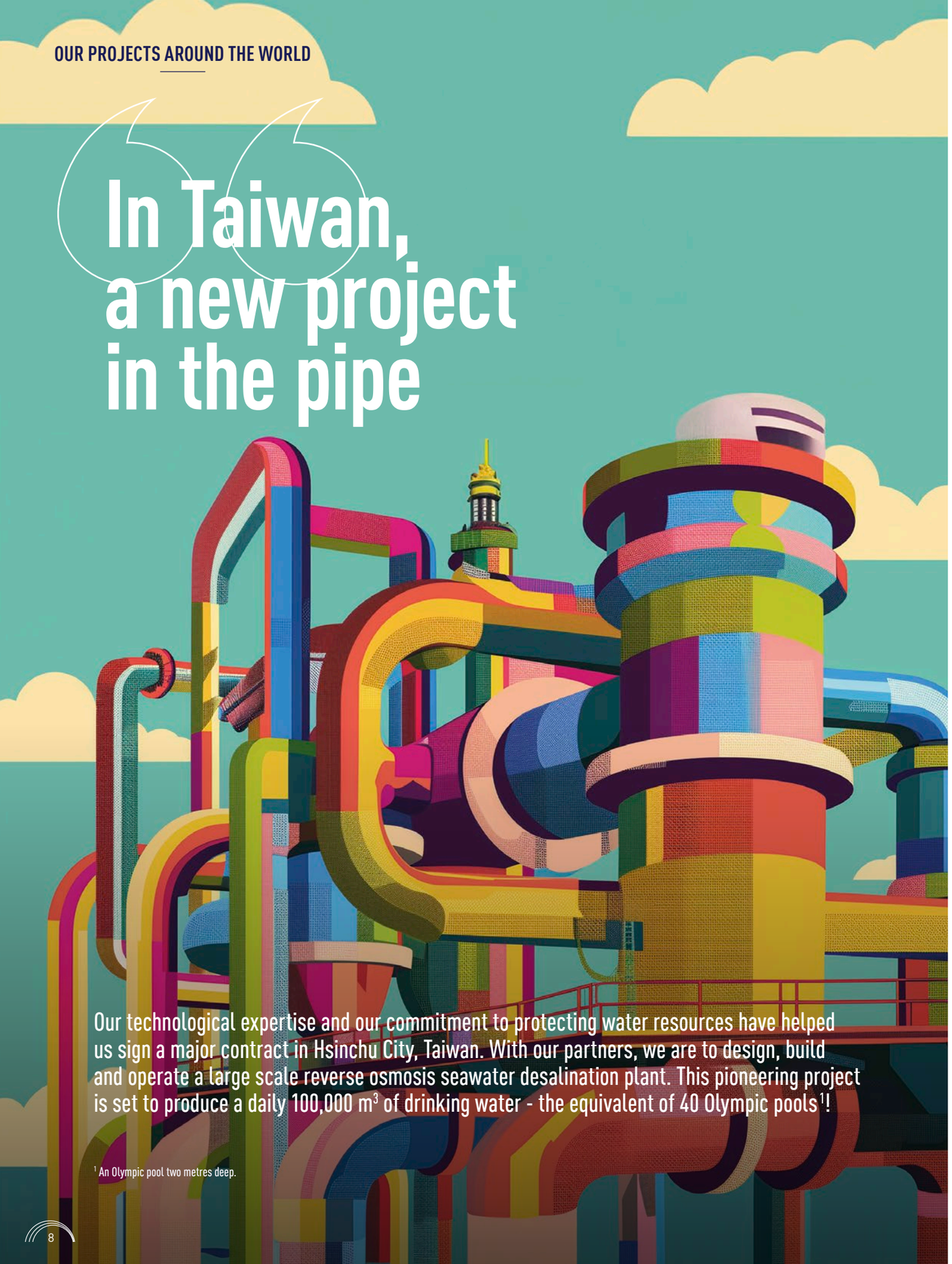
In Taiwan, a new project in the pipe



Our technological expertise and our commitment to protecting water resources have helped us sign a major contract in Hsinchu City, Taiwan. With our partners, we are to design, build and operate a large scale reverse osmosis seawater desalination plant. This pioneering project is set to produce a daily 100,000 m³ of drinking water - the equivalent of 40 Olympic pools[1]!

[1] An Olympic pool two metres deep.

Reducing water stress

The water supply in Taiwan primarily relies on reservoirs filled by rainwater. However, climate change and extreme weather events are threatening the reliability of the reserves of this essential element.
This is where seawater desalination offers a particularly effective solution.
The plant in the city of Hsinchu will help improve the stability of the water supply on its completion in 2028. **It will reduce episodes of water stress[2] and offer benefits to approximately 1.6 million inhabitants.** Its output will also support the major industrial park in Hsinchu, nicknamed Taiwan's Silicon Valley.
The water will be used in the production of semiconductors, essential components of computer and telecom electronic circuits that play a vital role in enabling a vast range of modern technologies to drive industrial innovations and shape our lives (Taiwan ranks among the top manufacturers of semiconductors, excelling in both technological advancement and market share).

Developing our know-how

In response to growing environmental challenges and increasing freshwater resource scarcity, we are conscious of the crucial importance of securing its supply. **SUEZ possesses long-standing experience in seawater desalination: indeed, we have designed and built more than 260 plants worldwide.**
Our technology can be found in two noteworthy instances in Australia: in Perth[3] and in the State of Victoria with one of the largest reverse osmosis desalination plants in the world. How does reverse osmosis seawater desalination work? First, we filter the water to remove sand and algae. Then we pump the water at high pressure through a very fine membrane that blocks the salt and impurities. This is how we obtain on the one hand drinking water, and on the other, water with high salt content. This is known as brine, and it is generally discharged into the sea.

Three patents that make the difference

Our cutting edge technology revolves around three tried and tested patents.
Seadaf™ is a compact water clarification solution. Its unique design makes it possible to process substantial volumes of water across reduced floor space.
Seaclean™ is a pre-treatment filter for seawater desalination. It helps to reduce water loss in the process.
Seapro™ is a range of standard reverse osmosis desalination plant components developed by our Engineering and Construction teams. It offers many benefits: shorter construction timeframes, controlled technical risks and lower overall costs.

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Backing up our legitimacy with this huge contract

SUEZ designs each of its plants as a unique response to the case in hand. Their common trait is that they all aim to achieve economic and environmental performance through the deployment of high-precision and internationally renowned technologies.
With our local partners CTCI Group[4] and Hung Hua[5], we have signed a contract worth a total of 508 million euros. This is a **pioneering project** that marks the first collaboration by the Taiwan Water Resources Agency with a foreign desalination solutions provider. According to Sabrina Soussan, Chairman and CEO of SUEZ, the plant "also sets a new benchmark for international cooperation in Taiwan's water sector."

Forever watchful of our environmental impact, we have reduced the plant's land-use footprint through a compact design. It incorporates energy recovery systems that reduce overall consumption. The use of zero carbon energy such as solar power also goes towards **improving the carbon footprint** of the desalination plant. Furthermore, the system for offshore pipe cleaning will be optimised to generate less wastewater.
These solutions address economic, energy and environmental challenges, and thus promote sustainable and responsible water supply.

[2] A situation where the demand for water exceeds the available resources.
[3] In operation since 2006, the Perth plant supplies over 45 billion litres of clean drinking water annually to more than two million people.
[4] CTCI Group is a Taiwan-based company whose main activity is in plant EPC projects.
[5] Hung Hua Construction Co. is a leading Taiwanese contractor specialising in coastal and offshore works.

In South Africa, we offer waste reclaimers a safer environment

Globally, about 15 million waste reclaimers[1] make their living from waste recovery, with just over 90,000[2] in South Africa alone. Yet, they receive little recognition for their contributions to reducing the country's environmental footprint. Often working in difficult and dangerous conditions, they deserve better protection. SUEZ contributes to their integration at two waste management facilities operated by its local subsidiary EnviroServ.

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WHO ARE THE RECLAIMERS?

They collect recyclable materials from streets and waste skips around residential and industrial areas before reselling them. According to Thabo Mtshweni, a research assistant at the University of Johannesburg, *"efforts to integrate reclaimers into the formal recycling sector are crucial for achieving sustainability, justice, and economic empowerment."* (*The Sowetan*, 27 juin 2024)

Recognised in March 2022 by the fifth United Nations Environment Assembly (UNEA 5.2), waste reclaimers play a key but underrated role in reducing waste in developing countries. **Contributing significantly to the circular economy,** their work leads to the collection of 80 to 90% of post-consumer recyclable waste, including plastics, cardboard, paper, electronic waste, and metal. Unfortunately, due to a lack of appropriate protective equipment and regulations around their trade while navigating fly-tips and landfills, these waste reclaimers often work in hazardous conditions.

Improved working conditions

Since acquiring EnviroServ, the largest waste management company in South Africa, in 2022, SUEZ has continued to support these essential workers by enhancing their integration and safety. Our Chloorkop and Rosslyn waste management facilities accommodate no fewer than 320 waste reclaimers, providing them with safe, humane, and hygienic conditions. **We supply them with appropriate personal protective equipment,** which they are required to wear at all times. This includes safety shoes, hard hats, hi-visibility vests, gloves, and safety goggles. Our subsidiary has also funded toilet units supplied by local small businesses. At each facility, two separate twelve-metre containers – one for men and one for women – serve as cloakrooms and provide shelter from the elements. EnviroServ delivers training in Safety, Health, Environment and Quality (SHEQ) rules, along with support in applying them.

The waste reclaimers comply with the legislation and rules applicable to EnviroServ's permit conditions at both the Chloorkop and Rosslyn waste management facilities. To ensure ongoing communication and compliance, they have established representative committees, responsible for maintaining order and promoting good behaviour at these two facilities. **Furthermore, the committees are regularly consulted to share ideas and solutions, ensuring the sustainability of this essential activity over time.**
One of the committee members at the Chloorkop waste management facility, Mama Cry Mahlakoane, has worked there for over 20 years. As a single mother, she reiterates how vital this income is for supporting her three children. Her son is currently attending a police officer training college, one daughter is at university, and the youngest is still in high school.

Waste reclaimers come from diverse backgrounds and have fascinating stories to tell—stories of triumph, hope, and resilience.

We have chosen to integrate waste reclaimers at our facilities, supporting them and contributing to their safety by improving their working conditions and methods. We aim to protect their health and actively enhance their quality of life.

[1] UN Habitat, Informal Waste and Recovery Sector, March 2023.
[2] Global Waste Management Outlook 2024 – United Nations Environment Programme (UNEP).
[3] Source: Report by GreenCape Organisation – Waste Market Intelligence Report 2021.

WHAT DO YOU DO, MUMMY?
WHAT DO YOU DO, DADDY?

OUR CHILDREN ARE CURIOUS, OUR JOBS ARE TOO.

Explaining your job to a child when you work halfway up a mountain, give a new life to bikes, protect soil or hunt for water leaks, isn't always an easy task. And yet...

Gérard, who acts to protect the Alps in Val Thorens, Catherine, who rescues "little gems" in Manchester, Saïd, who would love to see Meknes inspire the world, and Karyne, who devotes her time to user satisfaction, have all found the right words to explain the usefulness of their professions with simplicity and enthusiasm.

WHAT DO YOU DO, MUMMY, TO STOP WATER LEAKS IN GUIANA?

Gérard Dutrannoit,
Refuse collection team leader
Ménuires Val Thorens, France

For today I've been part of the SUEZ adventure for 17 years. I started in the company working in a waste sorting plant. Today I'm a team leader. My daily goal is to keep the streets clean and prevent pollution.
There's a lot of work to be done on the ground, particularly among the general public. I appreciate the fact that the company gives me the freedom to take concrete action. For example, we've made restaurant owners in the ski resort aware of the need to sort waste properly so that it can be recycled, and we've set up special skips so that materials that can be recycled don't end up mixed up with household waste.

For tomorrow I enjoy sharing, raising awareness, passing on best practice and communicating with local authorities, professionals and the general public about the environmental issues surrounding waste and sorting.
For the local authority, we are a service provider like any other, but we are also partners.
On the ground, we strive to make improvements. Local authorities should be more aware of this.

WHAT DO YOU DO, DADDY, FOR OUR SOIL?

Karyne Cadignan-Cormier,
Customer branch manager,
Guyanaise des eaux (SGDE)

For today With the eleven colleagues in my department, dedicated to customer service (multi-channel), we have one priority: our customers' everyday satisfaction, whether they are our personal customers or the local authorities that have appointed us as concessionaire. Customer service is all about providing solutions, but today our role goes beyond that.
We raise awareness among users and local authorities of the need to preserve water resources. In return, the population also expects a lot from our services. In French Guiana, the network is very extensive. The ferrous soil speeds up the erosion of an ageing network, causing leaks. We have to deal with these problems. Increasingly, our clients are alerting us to these pre-meter leaks. And we are counting on people being responsible in terms of leaks after the meter. We have to live up to their expectations. This puts us on constant alert and compels us to act quickly and efficiently.

For tomorrow Interaction is bound to grow between our clients (local authorities and users) and our customer service department.
New digital projects will accelerate this communication, making us ever more responsive. Our jobs are as dynamic as the movement of water. Every day is different, and we must always be ready to intervene and interact.
Corporate social responsibility will increasingly be a central part of customer relations. Our customers are at the heart of our commitments, and we are determined to succeed.

WHAT DO YOU DO, MUMMY, WITH OLD TOYS AND BIKES?

For today Instead of letting objects that still have value end up in a recycling centre, I make sure that they move on to the next stage: reuse. I work in a huge warehouse where we collect 'little gems' that people no longer use. We collect everything from toys and bicycles to lawnmowers! My role is to unload the vans full to bursting with these finds, sort them and then send the haul to our shops, where they're sold in aid of charity.
My team is always busy. We're forever checking that our shelves are crammed full of interesting items. You never know what you're going to come across. One day, 50 bikes. The next day, 100 vacuum cleaners! You need to be extremely adaptable.

For tomorrow Every month, we recover over 60 tonnes of waste to give it a second life. Our day-to-day mission is to promote repair and re-use, with the aim of creating a circular economy. And that's no mean feat! With over €1.5 million already raised for good causes in Greater Manchester, the Renew Hub is proving that reuse is not only good for the environment, but also for the community. We also offer educational tours.
I play a key role in raising public awareness about waste reduction. By raising awareness, we can gradually move towards a future where zero waste becomes a reality.

Catherine Kearns,
SUEZ Reuse Supervisor
Manchester

WHAT DO YOU DO, DADDY, FOR OUR MOUNTAINS?

Saïd Ettartouchy,
Leachate treatment and biogas recovery manager
Meknes, Morocco

For today My job at the Meknes waste treatment and recovery plant is to ensure that leachate is properly treated using a number of techniques (reverse osmosis, biological, nanofiltration, etc.). Leachate is the residual liquid produced by waste when it is stored in landfill sites. Once it has been collected and treated so it doesn't pollute the soil or groundwater, it becomes water that we can use again for watering or washing.
My job also involves capturing and recovering the 'biogas' emitted by the landfill waste, by converting it into heat and electrical energy. Our site is now self-sufficient in electricity, making a major contribution to reducing the country's carbon footprint and the energy transition.

For tomorrow As someone passionate about my job, which has an impact on protecting the environment and our planet, and proud to belong to the SUEZ Group, which is strongly committed to people and safety, I want to contribute to rolling out the Meknes success model for leachate treatment and biogas recovery to other sites. I am firmly convinced that sharing knowledge is the key to success. That's why I'm looking forward to sharing my know-how and skills with future generations of colleagues.

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WE DRAW NEW LINES... TO SHAPE NEW PERSPECTIVES

When Manila Bay, with its previously crystal clear waters, becomes nothing more than a polluted dump, we join forces to treat up to 65 billion litres of water a year. When a car goes to the junkyard, we offer it a new future. Finally, when it comes to our teams' safety, we pull out all the stops... and we do it in style.

A new day dawns on Manila Bay

In the Philippines, we are mobilised by a capital challenge: improve the quality of life of a million people and breathe new life into a legendary bay. Under the sponsorship of the government, this major environmental clean-up project seeks to drastically reduce water pollution in Manila Bay. This is a substantial project that draws on our technological expertise in wastewater treatment.

The capital of the Philippines, Manila, is the most densely populated city in the world, with over 43,000 inhabitants per km^2. Its bay naturally occupies a central role at the heart of the country's economic activity. For years, however, it has been plagued by discharges of untreated wastewater, making it one of the most polluted zones in the country. In January 2023, **the Philippine government described the bay as a 'dead zone' where marine wildlife was suffocating due to this extreme pollution.** With the aim of turning things around, an invitation to tender was issued. We submitted a bid for the contract and signed an historic partnership with Maynilad, the Philippines' first private water management concessionaire. Together, we presented an innovative project, subsequently selected, to rise to this major challenge and deliver a successful outcome.

In particular, we will be deploying the Central Manila Sewerage System (CMSS). **It will help to satisfy the water access needs of the capital's inhabitants, thereby improving their everyday quality of life.** Located in the port area of Manila, the treatment plant will be able to treat 180 million litres a day, the equivalent of 20 million six-packs of 1.5-litre bottles of water. The treatment process will utilise **Cyclor® Turbo**, a proven technology that is particularly well-suited to sites with limited space (see box). The plant will guarantee the quality of the treated wastewater, in compliance with local effluent regulations[1]. These requirements are comparable to European Union standards.

Benefits for nature and health

The clean-up will have a beneficial effect on Laguna de Bay, the country's largest freshwater lake. Connected to the bay by the short, 25km-long Pasig River, the lake is an essential source of drinking water for the Filipino population. Long described as an 'open sewer', the Laguna de Bay is regularly affected by toxic blooms of blue-green algae that pose health risks (gastro-enteritis, skin and throat irritation, etc.). We will also be refurbishing the old Tondo wastewater pumping station. A conveyance system will be built to carry untreated wastewater from customers to the treatment plant.

The CMSS project is scheduled to come on stream rapidly, in 2027. **Ultimately, the rehabilitation and protection of Manila Bay will improve the condition of the waterways and help to protect the health of the local population.** This project demonstrates our willingness and ability to lead ambitious projects to restore the environment.

The SUEZ Cyclor® Turbo

is an advanced technology used to treat wastewater. It is a compact, high-performance biofiltration system designed to improve the efficiency of effluent treatment. Thanks to its design, the Cyclor® Turbo can treat large quantities of water in a small footprint, while also reducing energy consumption. This solution is particularly suitable for areas where space is limited and where it is important that the water discharged meets strict environmental standards.

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[1] Effluent is wastewater from human activities, such as industry, factories or homes. It may contain pollutants such as chemicals, waste or residues. Before being discharged into the environment (rivers, lakes, seas), this effluent must be treated to avoid polluting the environment.

A new journey from scrapyard to showroom

Every year in Europe, 11 million vehicles are sent to the scrapyard. We want to capitalise on this hitherto untapped resource, which is what led SUEZ to acquire a 20% stake in The Future is NEUTRAL alongside Renault Group. It not only represents a technological challenge, but will also help us step up our expertise in the areas of vehicle recycling and the circular economy. Welcome to the journey ‘from car to car’.

LISTEN TO THIS ARTICLE

A car is 85% recyclable, but a new vehicle contains less than 30% of recycled materials. In a global environment of diminishing resources, where raw materials are both hard to come by and increasingly expensive, reusing materials is no longer just an option - it’s the way forward for all car manufacturers. They all know that they will have to embrace the ‘from car to car’ concept, a process that consists of building new cars from end-of-life vehicles.
From concept to reality, we need to create innovative solutions, and this is the ambition of The Future is NEUTRAL, **the leading player in the 360° circular economy in the automotive industry.**

Filling a gap in the market

In recent years, car manufacturers have had to live with the difficulties of sourcing many virgin raw materials and cope with their price volatility. This is not a cycle, but a new reality that needs to be learned and handled.

Every minute in Europe, 20 vehicles are consigned to the scrap heap. They constitute an exceptional and perpetual reservoir of ferrous and non-ferrous metals, batteries and mechatronic and electrical parts. Renault Group spotted this potential, and created The Future is NEUTRAL. This project aims to help the automotive industry become neutral in terms of the impact on certain natural resources used in the production of new cars. And this is where the alliance with SUEZ comes into its own, since we possess extensive and recognised expertise in automotive recycling. We have a long history of working with manufacturers and equipment suppliers, as well as steelmakers and foundries.
We have honed our expertise in the collection, sorting and recovery of automotive waste, and we are proficient in delivering consistent flows of recycled raw materials to our clients. On 3 October this year, we therefore took another step forward by jointly investing €140 million with Renault Group in the capital of The Future is NEUTRAL.

In 2023, this company’s activities generated cumulative sales of almost €1 billion, while its long term goal is to make €2.3 billion in cumulative sales with a double-digit profit margin. For SUEZ, this investment consolidates its legitimacy in the automotive sector and provides further evidence of its commitment to supporting the ecological transition of its stakeholders.

Aiming for zero, a mark of excellence

Safety in the workplace is our first priority, and we have a clear ambition: to have zero severe and fatal accidents. To achieve this, we have to control all the major risks and adopt safe behaviour. This is an ongoing process, and each and every one of us has an essential role to play.

Over nearly the past 15 years, we have been deploying the *Life Saving Rules* in our operations. These rules concentrate on accidents arising from the major risks inherent in our activities, such as falls from a height, gas risks or vehicle traffic on site. They are designed as the last individual protective barriers defining the behaviours needed to help avoid accidents. They are brought up in engagement meetings designed to raise awareness of the risks in our job disciplines and get our teams and partners onboard in abiding by the rule that will save their lives and those of others. Drawing on feedback from more than 260 employees, these rules were revised in 2023, when they were supplemented with key points to better align with the day-to-day realities experienced by our teams.

The Fair Culture, to create a climate of trust

We want to create an environment that encourages people to report incidents and makes everyone feel responsible for their own safety. The Fair Culture helps to bring about a climate of trust based on three main pillars: a positive approach to safety, spontaneous reporting of high-risk situations, and systematically responding to any failure to comply with certain rules. We are thus creating a culture that rewards safe behaviour and encourages good safety practices and freedom of speech on the subject.

Speak Up & Stop: actions speak louder than words

In 2024, we launched a new campaign called Speak Up & Stop to encourage our teams to intervene in dangerous situations. Whatever our position in the company, we all have a role to play. **We must step in to stop a dangerous activity without fear of reprisal or punishment.** By creating the right conditions, managers are key players in the Speak Up culture. Meetings were held to remind them of the importance of their role in instilling behavioural change. The more they encourage their teams to speak up, the more we succeed in building shared alertness to risks and dangers.

Safety ToolBox Talks: visual media for long-lasting effects

To ensure that our teams are fully aware of the risks to which they may be exposed, we regularly hold quarter-hour safety briefings where we share videos, testimonials, best practices and accident stories with them. These refresher and reflective moments built into employees' routines are designed to improve the safety culture and maintain high vigilance.

Safety without borders

On 3 October 2024, **SUEZ' general management and European social partners signed a new agreement on our teams' health and safety** in France, Czechia, Italy, Poland, Romania, Spain and the UK. This agreement, which updates the one that had existed since 2014, focuses on two main areas: improving workplace safety and taking care of employee health. It is the culmination of ten months' work, and forms a solid basis for enriching SUEZ's Health & Safety actions thanks to the feedback from the field that we encourage.

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WHY DOES REMOTE METERING MAKE THE WATER NETWORK SMARTER?

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Remote metering is a method of collecting water consumption data from a meter remotely, using wireless communication technologies.

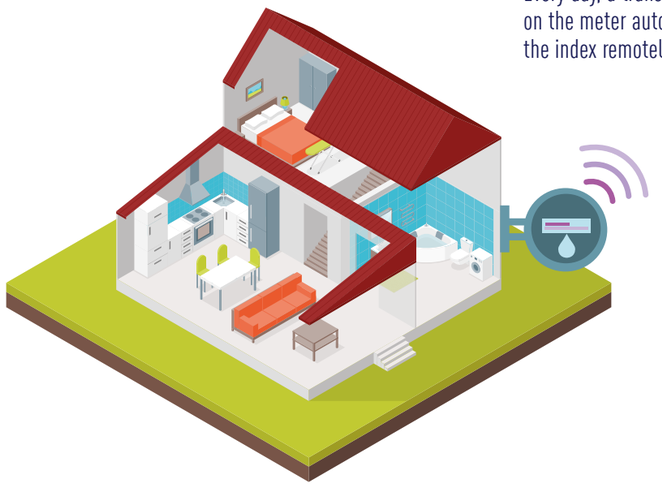
For SUEZ, the benefits of remote metering have been proven: more reliable metering, leak detection and improved network efficiency. But what does it do for users?

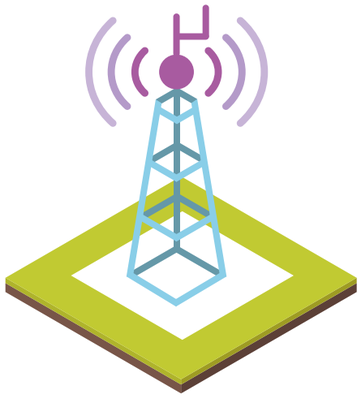
1 **A connected water meter** measures the volume of water consumed and the flow rate. Every day, a transmitter installed on the meter automatically reads the index remotely.

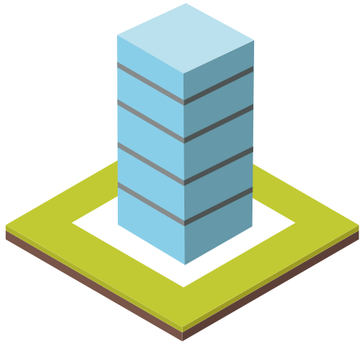
2 **A receiver collects data** from several nearby meters.

3 The data collected is then sent to a **processing centre,** where it is cross-referenced, collated and analysed by the water supplier.

4 The distributor thus has an accurate, up-to-date overview of the network. Finally, the data is posted daily on the **customer's online account.**







AN EASIER LIFE FOR USERS

Monitoring changes in actual consumption

Online digital services make it possible to monitor water consumption in real time and alert users to any discrepancies. Users can compare their consumption and assess whether it is high or low according to their profile.

Detection of any unusual over-consumption

Any anomalies relating to over-consumption – a stopped meter, a suspected leak, etc. – are detected very quickly.

No more need to be present at home

Data is read automatically and securely, without inconveniencing users.

Fair, controlled billing

Users can be sure that they will be billed on the basis of their actual consumption, thanks to a detailed statement of their consumption and the financial amount it represents.

Clear control for easier savings

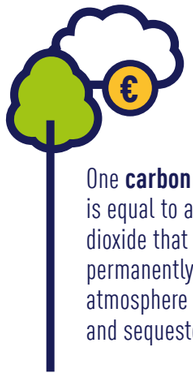
Online monitoring and individualised tips make it easy to reduce water and electricity consumption, saving money on both bills!

HOW DO CARBON CREDITS HELP US LIMIT GLOBAL WARMING?

If we want to limit global warming to 1.5°C, in line with the Paris Agreement, **we need to reduce our CO_2eq* emissions by 45% by 2030** and then reach net zero emissions by 2050.
Carbon allowances and **credits** are two mechanisms used to combat climate change, but they work in different ways. Carbon allowances limit a company's emissions through an emissions trading system. Carbon credits offset emissions by financing beneficial CO_2 reduction or sequestration projects elsewhere.

At SUEZ, for example, we have set ourselves the goal of drastically reducing our CO_2 emissions. However, after having avoided or reduced all the emissions that can be prevented, a certain amount still remains as a result of our activities. Given that this part of our emissions cannot be reduced, we need to find ways of offsetting them in a sustainable way. One way of doing this is to make a **financial contribution to eco-projects** (biochar, reforestation, etc.). These projects **avoid or sequester the equivalent of our remaining CO_2 emissions**, and their positive activity generates these certified carbon credits, in what is known as a voluntary offsetting approach. Through this balancing act, **our industrial activity will become carbon neutral by 2050.**

* CO_2eq: a measurement unit that converts the warming power of different greenhouse gases into their carbon dioxide equivalent.

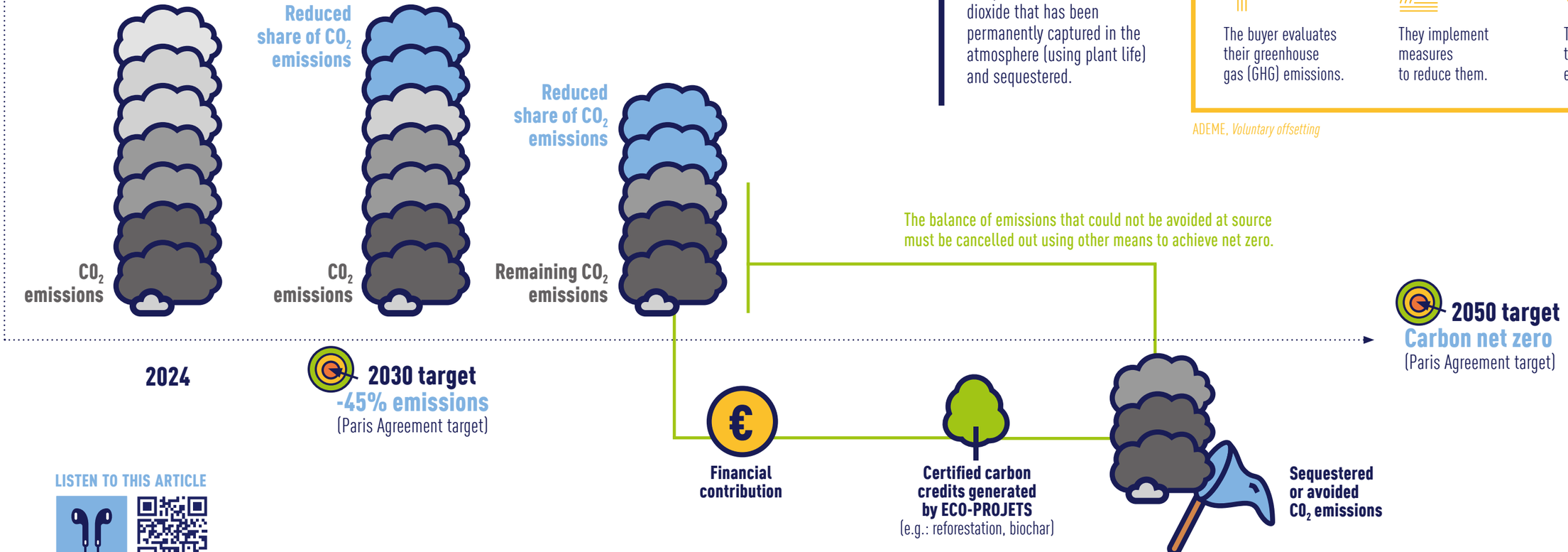


One **carbon credit** is equal to a tonne of carbon dioxide that has been permanently captured in the atmosphere (using plant life) and sequestered.

How do you carry out **voluntary offsetting** in practice?

1. The buyer evaluates their greenhouse gas (GHG) emissions.
2. They implement measures to reduce them.
3. Then they can seek to offset the GHG emissions left over.

ADEME, *Voluntary offsetting*



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FIGHTING CLIMATE CHANGE CAN BE COOL!

When you've grown up at the foot of the Semnoz mountain range (Haute-Savoie), you always have a deep affection for the beauty of these mid-altitude landscapes[1]. For Heïdi Sevestre, this affection has developed into a conscience and a career plan, to the point where she has become one of France's most recognised glaciologists... and one of its happiest. Her work has taken her to Antarctica, the 'white desert' of the South Pole, and also to Spitzbergen, an island in the middle of the Greenland Sea. According to Heïdi Sevestre, "we have to fight for every degree of avoidable warming" [2]. On her return from a kite-skiing scientific summer expedition on the Greenland polar ice cap with adventurer Matthieu Tordeur, we caught up with her to find out more about the importance of glaciers in our lives and our future.

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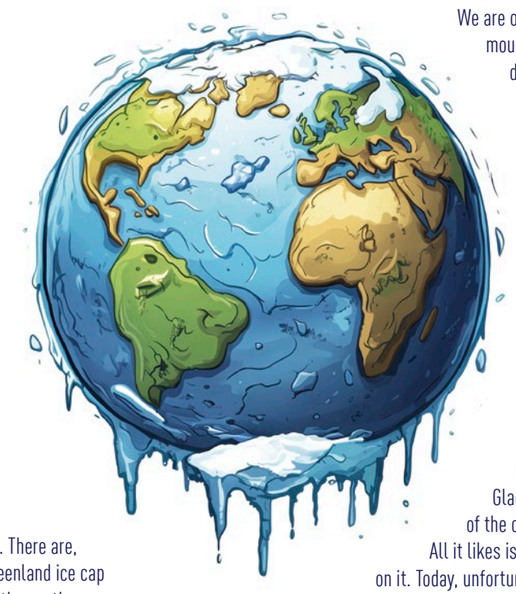
[1] Its summit, the Crêt de Chatillon, culminates at 1,702 m.
[2] *Outside*, 24 January 2024.

Heïdi, why do you care so much about glaciers?

I often say that **that glaciers are the best water towers we have on Earth.** A glacier is the result of a tremendous accumulation of snow. This spectacular accumulation has been built up over decades and centuries. With this snow transformed into ice, we have vast stocks of fresh water that are naturally born in our mountains. It's an extraordinary resource, free of charge and low maintenance. In the Alps, the glaciers provide us with fresh water from late spring to mid-autumn. It really is a seasonal source.

A source that transforms into many resources?

Yes, that's right. We use it to **produce energy, irrigate our crops or support a whole range of industries.** In some countries in the world, glacier water is also used for health-related applications. Along with snow, it is the primary source of fresh water. If we take a wider view, there are almost two billion people on Earth who use glacier water. That's pretty incredible. And I'm really only talking about mountain glaciers here. But there are other elements in the cryosphere[3].



What are they?

We have other types of ice on our planet. There are, of course, the two polar ice caps, the Greenland ice cap to the north and the Antarctic ice cap to the south. Here we find gigantic freshwater resources. Gigantic but fragile. Today, Greenland is losing around 30 million tonnes of ice every hour as a result of climate change and human activity. This massive melting is flowing into our oceans and contributing to rising sea levels. Together, **Greenland and Antarctica contain enough ice to raise sea levels by 65 metres.** These are staggering quantities.

Today, Greenland is losing around 30 millions tonnes of ice every hour

It's not just the people who live on the planet's coastlines who are affected. Releasing so much fresh water inevitably disrupts global ocean circulation, and this has consequences all over the world. Our climates are being altered. We are on a trajectory that could atomise mountain glaciers over the next few decades. Our freshwater resources will be directly affected. This will disrupt a whole segment of our water cycle. When glaciers melt, human lives are shattered.

When you were on the French TV show *Quotidien*, you said that *"glaciers make the invisible visible"*. What did you mean?

I borrowed that turn of phrase from the glaciologist Luc Moreau[4]. Glaciers are one of the best barometers of the climate. A glacier is quite simple. All it likes is for it to be cold and for snow to fall on it. Today, unfortunately, our temperatures are changing, our precipitation is changing, and so glaciers are changing too. A few weeks ago **on social media, we saw two photographs taken by a British couple 15 years apart in front of the Rhône glacier in Switzerland.** When you looked at these two pictures, the glacier today looked nothing like it used to. The snow and ice had all but disappeared.

[3] All the ice, snow and frozen ground on Earth.
[4] Using fixed and autonomous cameras, he takes photos of glacial phenomena in motion. Some of these are posted on his website moreauluc.com

It is estimated that Switzerland has lost a third of its glacier volume since 2000, and 10% in the last two years.

The power of these two photos says it all. You see it, you get the message. The glacier has retreated dramatically, and we're talking about changes that have taken place in just under a generation. We often talk about what could happen between now and the end of the century. That may seem a long way off, but we need to put these changes back on the scale of a human lifetime. These upheavals are accelerating.

We often hear that glaciers might disappear by 2100. What do you think?

You know, there are a lot of mountain glaciers on Earth – just over 200,000 – and they don't all react at the same speed. If we stay on our current course and don't lower the concentration of CO_2 in the atmosphere, we risk losing most of the glaciers in the Alps by the end of the century, but it's not inevitable. It really depends on us. We have a window of opportunity that is still open, but it is closing very quickly. The decisions we take today will have a cumulative effect on future generations. We are not saying that the glaciers will have disappeared by 2100, but we are clearly not on the right trajectory to save them.

We've got to decarbonise like mad.

Is a glaciologist a doctor who looks after glaciers?

Yes, precisely. When we looked at Alpine glaciers 100 years ago, they were massive and impressive. Today, they are dying. As a result, they pose a huge number of problems for us: **risks in the mountains, risks to infrastructure, risks to our water resources, risks to our coastlines...** We are looking after glaciers because they are very sick. The same applies to the polar ice caps, pack ice, permafrost and snow. All these elements of the cryosphere react very quickly to climate change, and we and all the biodiversity that depends on them are going to pay the price.

In the French broadsheet *Le Monde*, you said that the melting permafrost is equivalent to the gas emissions of a country like Japan.

Permafrost is ground that has been frozen for at least two consecutive years. In the northern hemisphere, we have an enormous amount of permafrost, covering around 23% of the landmass. Permafrost contains traces of everything that has been buried for tens of thousands of years, from plants to mammoths. **When it thaws, the microbes in the permafrost suddenly start eating the organic matter in the soil. By eating it, these microbes emit as much greenhouse gas as Japan,** the world's seventh largest emitter. That's quite something! And if we continue to raise our planet's thermostat, the permafrost will thaw even more. If we exceed a 2 degree rise in global temperatures (we're at around 1.2°C today), by the end of the century the permafrost could be emitting as much greenhouse gas as the European Union. Once this phenomenon starts, it's hard to stop. The only way to control it is to reduce our own emissions. We've got to decarbonise like mad.

Can glaciers help this process as carbon sinks?

We can't really talk about carbon sinks when it comes to glaciers, ice floes or polar ice caps. **But the oceans are among the best carbon sinks on earth. They rid us of around a third of our CO_2 emissions.** And because they are cold, the polar oceans are among the most effective carbon sinks. However, we are realising that by dissolving CO_2, the glacial Arctic Ocean is becoming more acidic, with knock-on effects on marine biodiversity.

Scientists have been alerting us to these dangers for many years. How can we transition from alert to awareness and action?

If we knew that, we wouldn't be in this mess. For decades, we have been led to believe that fossil fuels don't cause climate change. Now there are people claiming that we still need them to achieve the energy transition. Add to this the fact that political time does not match climate time. We are up against political agendas and votes that don't take into account the long-term vision of the environment. This isn't a problem for tomorrow, it's a problem for today, with devastating and traumatic consequences. We have a real need for awareness-raising and education. Some issues immediately provoke a reaction, particularly those that could affect human health or the cost of our food. When climate change threatens to exacerbate tensions between countries, this too can spark a desire to take action.

We're not fighting climate change to save the glaciers, but just to save ourselves.

If we fight climate change, we will have huge co-benefits for our health, our economies, employment, security, intergenerational justice and our cultural and landscape heritage. We are not fighting climate change to save the glaciers, but above all to save ourselves. We need all our collective intelligence to do that. Let's take SUEZ as an example. Your Group has a very large network, and raising awareness among its teams and partners can have a very positive impact.

So education as the ultimate weapon?

Education is going to be an absolutely crucial tool. When it comes to resources like water, we know that the key word will be sobriety. We're going to have to think about optimising our networks and our water management. We are seeing one extreme weather event after another, with long periods of drought followed by ultra-intensive rainfall. All this is putting a strain on our networks and forcing our water management to explore new limits. The hardest part will be managing the unpredictable. We will have to be even more agile in our water management. I particularly believe in this collective intelligence that will help us to preserve and optimise water, a resource that is so essential to our lives.

Sobriety and anticipation...

Yes, we need both. As I just said, we know that the water cycle will be disrupted in terms of quantity, quality and seasonality. Increasingly extreme weather events will test our limits. Let's not endure them, let's anticipate them.

Glaciers are one of the best barometers of the climate.

One of the most striking things about you when you're being interviewed is your smile. Is it important for you to raise the alarm... without alarming people?

We all feel a deep rage. Many of us are terrified by what is happening, but it's crucial to show that it's not too late. I'm very keen to communicate this, particularly to the younger generation with whom I work a lot. We have a choice. Either we bury our heads in the sand and ignore what's going on. Or we can see the problem and say to ourselves: "I have the opportunity to contribute to the survival of humanity. I'm lucky enough to be in a job that will get me on board this train of solutions for the climate and biodiversity." I'm trying to use my anger and my desire to act to be a driving force, to try to take part in this movement on my own small scale, to try to create a desirable and sustainable future. A future where we reconnect a little more with the nature we so desperately need. Yes, I do live in hope. I can see that things are happening. The UK has just closed its last coal-fired power station. About time, too! France is reducing its greenhouse gas emissions. It's worth pointing out!

Driven by her passion for glaciers, Heïdi Sevestre dedicates herself to raising awareness, touching hearts and challenging the people who hold the power to act. ***Sentinelle du climat*** (Climate Sentinel), published by Harpercollins, retraces her journey and her commitment to helping people understand, love and take action on climate issues. In her belief that emotion raises awareness, she has made educating young people a central part of her mission.

Demain, c'est nous (Tomorrow it's us), published by Édition Du Faubourg Éditions, recounts her adventure alongside François Bernard, a courageous teacher who took his pupils to the North Pole to raise awareness of climate change.

Heïdi Sevestre is a French glaciologist committed to the fight against climate change. A graduate of the University of Svalbard and the University of Edinburgh, she has conducted research on glaciers in polar and alpine regions. Passionate about popularising science, she works to raise public awareness of the impact of global warming on glaciers and ecosystems. As a communicator and explorer, she has taken part in several scientific expeditions, and works with international organisations to promote concrete action on climate issues. Heïdi Sevestre is an inspirational figure in the field of environmental science.

We need to instil FOMO (Fear Of Missing Out) in everyone who hasn't yet got on board. As far as I'm concerned, I have a job that gets me involved in this movement. I have a framework that lets me take action. I use this special situation to give it 3,000%. I'm having a great time doing it and it's important to say so. You can have a blast, you can find fighting climate change cool, you can meet extraordinary people and discover solutions that blow your mind. So, yes, let's enjoy this action against climate change, it's important.

When glaciers melt, human lives are shattered.

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How does the price of water break down?

While water is a free natural resource, the services required to convey, treat, distribute and recycle it do have a cost. You only have to look at your water bill to realise just how high that cost is. Arnaud Bazire, CEO of SUEZ Water France, explains the price of water and wastewater services, and the prospect of price increases in the face of tighter regulations and the challenge of climate change.

Why does the price of water vary from one water board to another?

Arnaud Bazire: First of all, we often talk about the 'price of water', but what we really mean is the price of the 'water and wastewater service'. As a resource, water is free, but the service infrastructure required to manage it (collection, treatment, distribution, wastewater treatment, etc.) has a cost. In France, local authorities set the rates, and prices vary depending on the region and the infrastructure needed to supply it. The price may vary, for example, depending on whether the water is easy to obtain or has to be transported over long distances. The quality of water is also a factor, as it may require more or less complex treatment.

France could face a 2 billion m³ shortfall of water between now and 2050

So all of this feeds through to our water bills?

A.B.: Yes, but there's more. The bill covers both operational and infrastructure costs, but there are also taxes associated with water management. The subscription, which is the fixed part of the bill, doesn't depend on your consumption. Even if you don't use water, you still have to pay this part. In France, the fixed charge is regulated and varies according to the zone: 30% in urban areas, 40% in rural areas and no ceiling in tourist areas. The variable component depends on the cubic metres you consume. This is a crucial component, since it accounts for around 80% of revenue.

How is this money divided up?

A.B. : Fees are paid to central government, local authorities and water boards to finance infrastructure, resource conservation and the fight against pollution.

Beyond pollution, is climate change having an impact on how we manage water?

A.B.: Yes, of course. We are seeing more frequent and more intense droughts, and this is putting greater pressure on water resources. In France, for example, there could be a shortfall of 2 billion m³ of water by 2050 if demand remains flat. The drought in 2022 raised our collective awareness. It had the effect of an electric shock. In 2023, water consumption fell by 3 to 4%. This is considerable when you compare it with the average annual decline of 0.5 to 1% that has been seen in recent decades. This trend could be amplified by the 2023 Water Plan, which targets 10% savings in all sectors. However, this reduction in consumption, while very welcome for its positive impact, poses a financial problem, since revenue depends on the volumes consumed. Therefore, we need to rethink how water is financed and how we can help the most vulnerable populations cope with this foreseeable additional cost.

Water bills account for less than 1% (0.8%) of the budget of a French household, half the amount spent on telecoms

Is water expensive in France?

A.B.: In France, the average price of water is relatively low, at around €4.52 per cubic metre (or 1,000 litres). By comparison, in Germany it is around €4.70 and in Denmark it can be as high as €6.70, which is one of the highest rates in Europe. Water bills account for less than 1% (0.8%) of a French household's budget, half the amount spent on telephones and four times less than on energy.

Could a price rise have a positive effect on our consumption?

A.B.: Maybe, but that's not enough of a lever. There are initiatives aimed at encouraging people to use less water, such as progressive pricing, where the price increases according to the amount of water consumed. In Dunkirk, for example, this type of pricing system has been introduced with a degree of success. In any case, water prices will have to rise to cover fixed costs and meet current and future challenges. Equipment needs to be modernised to meet the higher regulatory requirements for pollution treatment.

Not all uses require potable water: how much do we reuse treated wastewater in France?

A.B.: The practice is still marginal in France, but it represents a major opportunity for more sustainable water management. At present, France only reuses around 1% of its treated wastewater, mainly for non-potable uses such as watering landscaped areas, street cleaning and agricultural irrigation. By way of comparison, countries such as Italy and Spain reuse 8% and 14% respectively of their wastewater, and in Israel the figure is a remarkable 80-90%. France is beginning to catch up. This is one of the reasons behind the Water 2023 Plan, but the transition remains slow, not least because of the cautious attitude of authorities and societal obstacles. And yet, the reuse of wastewater could ultimately prove a particularly effective solution in coastal regions or areas suffering from water stress.

Aquassistance, 30 years of immersion

Aquassistance is the international solidarity association for active and retired employees of the SUEZ Group. For the past 30 years, it has been providing vulnerable populations with decisive assistance in the fields of water, sanitation and waste management. Supported by the Fondation SUEZ, its volunteers are active all over the world.

It all began in Rwanda in 1994. That year, the 'country of a thousand hills' experienced one of the greatest tragedies of the 20th century, with the massacre of a million Tutsi women, men and children. This unbearable violence was compounded by a brutal deterioration in living conditions. Employees of Lyonnaise des Eaux, now SUEZ Eau France, mobilised to restore the drinking water supply. On their return from this mission, Aquassistance was created. Since then, it has been involved in two areas: emergency and post-emergency humanitarian aid following a natural disaster or humanitarian crisis, and development aid to advise on, install or rehabilitate facilities.

Aquassistance's work is widely recognised in the field of international solidarity, and **the challenge is immense, since more than 2 billion people are still deprived of drinking water and 3.5 billion have no access to a sanitation system.** If nothing changes, one person in four will be affected by a lack of fresh water by 2050.

Conscious of these challenges, Aquassistance aligns its actions with Goal 6 of the United Nations' Sustainable Development Goals for 2030, which aims to guarantee universal access to water, sanitation and improved hygiene. To carry out its projects, Aquassistance has formed partnerships with hundreds of local organisations and dozens of public and private donors. Among them, **Fondation SUEZ plays an important role, financing 100% of the association's annual operating budget.**

Behind the figures lies a huge display of human and international solidarity. **Volunteers, both active and retired SUEZ employees, contribute their holiday time and can also make use of the Group's solidarity time credit** (2 days/year). They develop water and sanitation infrastructures and train local beneficiaries to operate and maintain the facilities. To find out more about our initiatives, **join up as a member** and, if you wish, contribute to projects as a volunteer, by visiting www.aquassistance.org.

better access to drinking water for
2.5 million people

more hygienic conditions for
1 million people

Since 1994

650 development aid projects in **77 countries**

2,200 volunteers
mobilised across five continents

60 emergency humanitarian missions
have helped provide drinking water to populations hit by natural disasters and conflict

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A successful debut at VivaTech for SUEZ

Rubbing shoulders with big names in technology and artificial intelligence, SUEZ left a lasting impression through its debut participation at VivaTech, Europe's biggest event dedicated to innovation and start-ups. We look back on this gathering of the future.

At SUEZ, innovation and digital solutions are among our key levers for meeting complex and growing environmental challenges. Among our assets worth mentioning are our **1,700 patents, ten R&D centres of excellence around the world, and a 50% increase in the budget allocated to R&D between 2022 and 2027.**

At VivaTech, we presented our most original approaches to supporting major ecological transitions. For instance, we organised live demonstrations of our **Autodiag technology, a tool that assesses waste sorting quality in real time.** Another innovation was **the sewer family, a collection of floating, rolling or flying objects that inspect wastewater networks.**
Our innovations captured the attention not only of visitors but also of our social media communities: during the week of VivaTech (22-25 May 2024), we recorded almost 1 million impressions on the various networks and a 79% increase in engagement with our messages on Instagram.

Vivatech 2024
165K visitors
(+10% compared with the previous year)

We also shared two major Open Innovation announcements, including one concerning our investment in Subeca, a North American company developing smart water meters. With this solution, our private customers simply scan the QR code on their meter casing to find out how much they are using, and also to detect any water leaks.

Sabrina Soussan meanwhile spoke at the round table entitled *Should We Be Reinventing Our Business Models?* where she exchanged views with Luca de Meo, CEO of Renault Group, and Mohamed Kande, Global Chairman of PricewaterhouseCoopers (PwC).

All these initiatives were reported upon in the specialist and national media. Another source of satisfaction is that we met with a number of international key accounts, and several of them are continuing their discussions with our teams. For a first-time participation, it's hard to imagine a more encouraging outcome.

Through **Open innovation,** we are working with leading universities and academic institutions, and innovative start-ups, SMEs and mid-sized companies. These include Sorbonne University, the French National Research Institute, INRAE, etc.

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We help young people create their future paths

It's a little known fact that 60% of young people in France live outside major urban centres[1]. Secondary school pupils and students from these small towns and rural areas face a number of hurdles in fulfilling their academic and professional plans. Created in 2016, the Chemins d'avenirs ("paths for futures") association supports and mentors them to reduce these territorial inequalities.

To date, more than 12,000 young people have benefited from this support. Last September, the Fondation SUEZ signed a three-year partnership with Chemins d'avenirs. Through this sponsorship, we hope to reveal the potential of young people in rural areas, raise their awareness of environmental challenges and increase their opportunities for access to careers in the green transition.

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[1] INSEE
[2] IFOP survey *"Jeunes des villes, jeunes des champs : la lutte des classes n'est pas finie"*, for Fondation Jean Jaurès and Chemins d'avenirs, October 2019.
[3] *La France Périphérique*, a book by Christophe Guilluy (Flammarion).
[4] Opinion Way survey *"Les Français et les métiers de la transition écologique"*, for Institut Supérieur de l'Environnement, 2023.

Fondation Suez and Chemins d'avenirs, a long-term partnership

Some figures are hard to ignore. Today, 42% of young people aged 17 to 23 from rural areas feel that they "do not have (or have not had) enough information to help them decide their future"[2]. The isolation of young people from this peripheral France[3] is like an invisible wall.
It's there, but hardly anyone talks about it. It needs breaches to be created in it to open up new paths. It was in this perspective that Salomé Berlioux created Chemins d'avenirs in 2016 to reach out to the 10 million young people who, according to INSEE, live in rural areas or in towns with fewer than 25,000 inhabitants.

This positive and socially aware initiative is now going to benefit from a long-term partnership with the Fondation SUEZ. We share the desire to help young people realise their full potential, particularly in environmental professions. Indeed, 38% of 18 to 24-year-olds dream of working in the ecological transition sector[4] and it is natural for our Foundation to encourage and facilitate the fulfilment of these ambitions.

To achieve this, we are working with Chemins d'avenirs on a multi-year programme focusing on six key areas:

1) **develop an academic, professional and civic pathway for young people, accessible online, based on a just transition.** Our employees will act as ambassadors;

2) **raise awareness among young people in rural areas of environmental issues and careers to do with the green transition.** For this purpose, dedicated tools and media will be made available to the young people supported by Chemins d'avenirs;

3) **create a 'Fondation SUEZ – Chemins d'avenirs' ecological transition grant.** In practice, we will launch a call for projects and provide financial support for local initiatives by young people in favour of the environment;

4) **design an environmental module on the OMI platform.** Developed by Chemins d'avenirs, OMI is the first web application designed specifically for academic and career guidance for secondary school students in rural areas and small towns. It is deployed within the French education system and helps young people to become more proactive in their choice of studies and careers;

5) **identify local associations to co-construct specific support programmes** established in local communities;

6) **provide financial support to Chemins d'avenirs to reinforce its activities,** with the ambitious and determined objective of supporting 50,000 young people by 2027.

It's a founding pillar of the Fondation SUEZ – what's a just transition?

The International Labour Organization (ILO) defines a 'just transition' as "greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind." Indeed, it is essential to envisage and successfully implement changes to combat global warming, preserve our natural resources and reduce pollution, while nevertheless taking into account the impact of these changes on the most vulnerable populations. Reducing our environmental footprint must also reduce inequalities and create sustainable jobs that protect social and economic rights.

Rooted in the long term – and in communities

The Fondation SUEZ will be working alongside Chemins d'avenirs for the next three years, but it will also be offering its 25,000 employees throughout France the opportunity to get involved through skills sponsorship. The 'solidarity time credit' scheme we launched in 2023 allows every member of our workforce to contribute to our initiatives for two days a year, by consulting the community service missions accessible on the **vendredi.cc** website.
Taking part in this project will not only contribute to reducing the territorial divide, but will also allow us to work effectively towards a just transition and the social inclusion of disadvantaged people in France. According to Salomé Berlioux, this project "will enable thousands of young people who live a long way from major cities to play an active role in the ecological transition, discover the training courses and careers in the sector and benefit from special opportunities."

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An Aggregation – Studio Seon Ghi Bahk – Photo: Bak Hyonjin

SEON GHI BAHK
AN AGGREGATION 10-05 (2010)

"I have tried paradoxically to represent a form with charcoal as the end of nature, hoping that this modest civic endeavour will underline the importance of rebirth or recycling."

Korean artist Seon-Ghi Bahk reflects on the impermanence of things through his creations. He is famous for his monumental, ethereal installations using pieces of charcoal suspended from nylon threads. The lightness, fluidity and fragility of his sculptures illustrate the fragility of our lives and our environment. Charcoal evokes the existence of trees but also, in a more philosophical way, the fragility of life and the power of rebirth. Trees have always been humanity's companions, always exposed to our existence and often to our neglect. This work is suspended in the air. The tree appears to be reborn, rising from its ashes in a subtle and surprising visual poetry.