THE GLOBAL CHAMPION OF ECOLOGICAL TRANSFORMATION

THE ESSENTIALS 2021-2022





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ECOLOGICAL TRANSFORMATION IS OUR PURPOSE

It is urgent

Never have ecological imperatives been so immediately perceptible and their consequences on our societies so apparent for communities. Climate change, depletion of resources, collapse of biodiversity, multiple forms of pollution: The ecological emergency requires us to go well beyond the "transition" alone.

We must act now

We can no longer procrastinate and gradually adapt our ways of doing things. The time has come for ecological transformation, for clear-cut and structuring decisions. As the reference company for the ecological transformation, we are committed to accelerating and massively deploying existing solutions, while investing in research and innovation to anticipate tomorrow's needs on a global scale.

With solutions that turn the tide

Only in-depth transformations will enable us to adapt production and consumption patterns in a concrete and massive way. We design and implement concrete solutions to accelerate the ecological transformation and deliver a useful circular economy that protects the planet and the future of humanity.

For and with our stakeholders

We work hand-in-hand with our stakeholders – industry and agriculture, local and national authorities, NGOs, individuals and citizens – in the belief that economic, environmental, social and community needs must be considered as a whole, in the same chain of responsibility.

OUR AMBITION IS HUGE, BUT SO IS OUR DETERMINATION

A NEW CHAPTER IN THE GROUP'S HISTORY



Antoine Frérot 2021 was a historic and exceptional year. We overcame the exceptional context imposed on us by the coronavirus pandemic with an extraordinary project: Our merger with Suez, an operation of a size and scope that Veolia had never experienced.

Estelle Brachlianoff What I will remember about 2021 are my first discussions with the Suez teams who were going to join us: We found that we spoke the same language, that we had the same vision of the business and that we could achieve a lot together.

- MERGER WITH SUEZ

E. B. It's going very well. It has to be said that we prepared it carefully, and that everyone did their bit to make it work from day one. We made sure we had all the right cards in our hand to ensure success. This preparation has paid off: The organizational charts are in place, the teams work together, information circulates, the processes are connected. In less than six months, we will have succeeded in making this merger a reality. It would be difficult to go any faster. **A.F.** 40,000 people joined Veolia. We are now looking forward to reaping the benefits of this merger, as the development potential of the new entity we are forming is promising.

- SUCCESS

A.F. Our Group is doing well. There are several reasons for this: The relevance of its strategy and the quality of its implementation, the strong involvement of its teams, and their expertise and capacity for innovation. But there is another reason: Veolia has given itself a purpose. As a result, it knows why, for whom and how it wants to be useful to its stakeholders. Over the years, we have focused our business model on the most buoyant sectors; we have made our organization more agile and responsive;

and we have incorporated more added value into our products and services. In 2021 we achieved many commercial successes while actively preparing for the merger with Suez. **E. B.** With our purpose, you have launched a profound intellectual, strategic, and managerial revolution. Our purpose is very important, especially for the young people who join us. When they find out about it, they say to themselves: "This company has a soul; it's worth committing to it."

- 2022

E. B. Geopolitics has come back into our daily lives in a dramatic way with the conflict in Ukraine. This crisis confirms that the strategic choices we've made over the years for our customers and for ourselves were the right ones, that is, reduce our dependence on fossil fuels and global supply chains, because this is both good for the planet and a source of autonomy and therefore freedom. **A. F.** Veolia is all the more able to support the essential transformation of production methods and lifestyles that this paradigm shift implies because that is our business!

E. B. For 2022, we have announced an organic EBITDA growth target of between 4% and 6%. And we are already starting to reap the benefits of the synergies generated by our merger with Suez.

- FUTURE

E. B. The Group has already earmarked an exceptional budget of €150 million to accelerate the rollout of solutions that enable us to consume less energy and produce more: Within two years, working with our customers, we will have reduced our consumption by 5% and increased our production by 5%. This approach is not confined to energy.

We are seeking to invent or improve processes

"We overcame the exceptional context imposed on us by the coronavirus pandemic with an extraordinary project: Our merger with Suez." "If we want Veolia to continue to lead the way in its field, we must be ever more aware of the times and anticipate the expectations of our stakeholders."

that can take the resources immediately available in waste and effluent and extract or produce locally from them all the materials needed for modern economies to function smoothly. For example, recycling plastic and reusing wastewater; recovering rare earths and precious metals from electric batteries, computers and mobile phones; recovering organic waste and sewage sludge as agricultural fertilizers; producing flour from organic waste to feed animals, and so on.

- NEXT STRATEGIC PROGRAM

A.F. Starting this year, we will be drawing up Veolia's next strategic program, which will begin in 2024. The Board of Directors will monitor the strategic directions adopted and their operational implementation. It will also closely monitor the implementation of the merger and the management of our purpose. **E. B.** In other words, we will continue to forge ahead together.





ESTELLE BRACHLIANOFF Chief Operating Officer for Veolia

VEOLIA OVERVIEW

With a broader international footprint across five continents in 2022, Veolia is changing scale to become the global champion of ecological transformation to help regions and companies.



€38.4 BILLION CUMULATIVE REVENUE FOR

THE NEW ENTITY FOR THE PAST FINANCIAL YEAR⁽¹⁾



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ESSENTIAL STRENGTHS⁽¹⁾ FOR

ECOLOGICAL TRANSFORMATION



<image>



HIGH VALUE-ADDED KNOW-HOW

• Expertise in the treatment of the most complex environmental problems, such as hazardous waste, soil remediation and decontamination of industrial effluents, etc.

LOCAL, CO-DEVELOPED AND HIGH-IMPACT INNOVATION

4 research sites with 30 specialist laboratories
A network of over 200 partners worldwide
An Open Innovation approach, VIA by Veolia

COMMITTED WOMEN AND MEN

176,488
employees
87%
of employees
proud to work
for Veolia

AN AMBITIOUS CLIMATE STRATEGY

 A 2050 net zero roadmap currently being defined for scopes 1, 2 and 3
 GreenPath, an offering of 100 solutions to reduce the carbon footprint of customers across their value chain

he essentials Veolia 2021 • 2022

MULTIFACETED PERFORMANCE

Only radical transformations will allow us to adapt our production and consumption patterns to preserve the planet and the future of humanity. Improving our clients' environmental footprint is our core business. It is also the source of our business model. Our company is simultaneously local and global and is part of the long term.



THE PURPOSE AS OUR COMPASS

Veolia's purpose states that a company **prospers because it is useful**, not the other way around. At Veolia, we are convinced that the continued development of humanity is only possible if economic, social and environmental issues are addressed as an inseparable whole. By making access to drinking water a lever for public health and quality of life, Veolia has been leading the way since 1853. Today, for water, waste and energy, we provide our public and private clients around the world with solutions that facilitate access to essential services and preserve resources by using and recycling them efficiently.

DELIVERING MULTIFACETED PERFORMANCE

Multifaceted performance is at the heart of the company's organization and operations. It is measured on five dimensions: social, environmental, commercial, economic and financial, and human resources, corresponding to all of Veolia's stakeholders. It pays equal attention to each of these dimensions and **aims for balance**. In concrete terms, multifaceted performance targets 18 goals and is measured by 19 indicators. Each of the 18 goals is co-supervised by an "Excom sponsor" and a "Group target manager". The indicators are audited each year by independent bodies.



To encourage the company to open up to its stakeholders in order to accelerate its ecological transformation, Veolia created the **"+1, the ecology turned into actions"** collective, which brings together some 50 of their representatives (employees, clients, shareholders, society, planet). The objective is to work together to promote ecological transformation. The approach is shared on the Group's website.

In 2021, Veolia also launched **A School for the Ecological Transformation** with two missions: promote ecological transformation solutions and the most relevant impact assessment tools with regard to planetary boundaries and sustainable development; and train people at all levels of qualification in the skills and professions of the ecological transformation, particularly for the long-term unemployed or people engaged in a retraining course. This project brings together companies, public employment and training bodies, and social partners.



POUR UNE ÉCOLOGIE

EN ACTIONS

ACCELERATING

THE ECOLOGICAL TRANSFORMATION AND RESPONDING TO 4 MAJOR CHALLENGES

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VEOLIA

A PART C

FIGHTING CLIMATE CHANGE



The fight for the climate starts now. To limit global warming, we must drastically reduce fossil fuels, increase renewable energies, improve energy efficiency, and change our lifestyles. Because climate hazards are already having an impact on us, Veolia provides systems to ensure the continuity of water and energy services in response to the effects of climate change.



The Group is also working to reduce greenhouse gas emissions through energy efficiency in buildings and the use of local and future energy sources. It contributes to the acceptability of industrial activities, securing their supplies and reducing their carbon footprint. Acting for the climate means developing new renewable energy resources as close as possible to the regions. In **Brazil**, for example, green electricity produced from biogas from organic waste will cover the electricity and heating needs of a city of 42,000 people. In the states of São Paulo and Santa Catarina, Veolia has inaugurated three new power plants (12.4 MW) at its waste recovery centers. In Rialto, California in the United **States,** a microgrid combining biogas cogeneration, solar panels and a battery backup system will supply energy to the city's wastewater treatment plant. As California faces an increasing number of natural disasters related to climate change, the energy independence of the plant will make it less vulnerable to power grid failures caused by heat waves and wildfires. This project will also contribute to the protection of natural river environments. Furthermore, Veolia is developing locally sourced and renewable fuels, such as SRF (solid recovered fuel) produced from non-recyclable waste, which replaces fossil fuels. For Solvay,



Innovation focus

Acting for the climate also means designing solutions that limit greenhouse gas emissions, such as CO₂ capture and the use of green energy. Take for example the cultivation of microalgae that Veolia and TotalEnergies are experimenting with to produce new generation biofuels by capturing CO₂ from the atmosphere. This research project at the La Mède biorefinerv in **France** aims to identify the most efficient microalgae cultivation systems. Furthermore, Veolia and TotalEnergies have joined forces to recover biomethane from Veolia's waste and

wastewater treatment facilities in more than 15 countries. Their aim is to produce up to 1.5 TWh of biomethane per year by 2025. Among the most innovative ecological projects, Veolia is assessing a system to produce green hydrogen from sewage sludge in Hyères with the Toulon Provence Méditerranée metropolitan area in France. This fuel is used by several of the city's vehicles and a ferry shuttle. Eventually, a wastewater treatment plant will be able to produce 200 to 300 kg of green hydrogen per day.

"Veolia contributes to decarbonizing industry as part of the ecological transformation."

ANTOINE FRÉROT Veolia Chairman and Chief Executive Officer



Veolia is also stepping up its production of photovoltaic electricity at its sites and for its clients. It provides **energy flexibility** solutions for electricity networks through load shedding and aggregation. For example, the company optimizes the environmental footprint of 1,900 wastewater

which treat 630 million cubic meters of wastewater per year, by modulating their electricity energy consumption using artificial intelligence. This electricity flexibility allows more intermittent renewable energy to be used in electricity distribution networks.

treatment plants,

ntials Veolia 2021 • 2022

OPTIMIZING THE USE OF RESOURCES





30% RECYCLED PLASTIC IN CAR INTERIORS BY 2025 FOR THE AUTOMOTIVE INDUSTRY WITH FAURECIA The time of the circular economy has arrived: water, waste and energy have several lives. To secure resources, ensure their availability and control their cost, Veolia designs local production solutions to improve and reduce consumption on an industrial or city scale. Water cycle, local energy loops and energy recovery: Veolia reduces water withdrawal by promoting water recycling and the reuse of wastewater. It invents efficient and ecological energy systems and recovers waste in the form of energy and materials. As a major player in plastics, it recycles several types of resins and offers a quality alternative to virgin material. The effects of the climate crisis are very real and water is one of the resources most affected. Digital innovation is increasing the resilience of water and wastewater services. In Japan, Veolia is using digital solutions to conserve water resources in Miyagi prefecture. Appointed to head a consortium of partners, including the Japanese leader Metawater, the company is managing the operation and modernization of the drinking water facilities for a period of twenty years. This concession is the first of its kind in Japan since the 2018 water law, which authorizes management by private operators. In France, the Jourdain circular water economy program goes further and is paving the way for the future by reproducing the natural water cycle. Faced with heat waves and the water stress associated with its tourism appeal, the Vendée region in France and Veolia are trialing wastewater reuse to secure the region's drinking water supply: this is a first in France and Europe. Instead

of being discharged into the ocean, some

of the water leaving the wastewater

plant and transported to a vegetated

area 25 km away.

treatment plant is treated in a refining

After further steps, the drinking water production plant makes it available for household consumption. This program has three objectives: to supply summer holiday areas in a circular manner, to validate the conservation of the natural environment and to bring about change in legislation in France and elsewhere. Like water, waste can be recycled. Its energy recovery reduces the use of fossil fuels. In the port of Antwerp in Belgium, organic waste is becoming an urban mine of green energy: Veolia's first organic waste methanization facility, **Upgrade Bio Energy**, will supply a local industrial company with 100% green electricity, generated in a cogeneration plant using biogas. Additionally, plastic recycling has increased significantly in the past three years, thanks to greater consumer awareness. Manufacturers are asking Veolia to introduce more and more recycled plastics into their production. Our collaboration with Faurecia is a pioneer and is targeting 30% recycled plastic in vehicle interior modules by 2025.



Innovation focus

By 2030, the number of electric vehicles on the road worldwide is expected to rise to 100 million from 10 million today. The stakes are high. Renault, Veolia and Solvay have set up a consortium to recycle metals from end-of-life batteries in a closed circuit and reuse 95% of materials recovered to manufacture new batteries. The recovery of strategic metals cobalt, nickel and lithium – and their reuse are an essential asset for Europe. And in a changing world, water treatment remains vital. That's why the

Aquavista-Hubgrade platform combines digital tools and Veolia's expertise to make water processes more efficient, smarter and more sustainable. This solution optimizes water treatment for local authorities and industrial companies throughout its entire cycle. It reduces costs while guaranteeing water quality. Hubgrade offers secure 24/7 access through a customizable web portal.



"With secondary raw materials for the automotive industry, we contribute to sustainable mobility which is at the heart of the ecological transformation."

ESTELLE BRACHLIANOFF Chief Operating Officer for Veolia

TREATING POLLUTION, EVEN THE MOST DIFFICULT



"For the nuclear sector, now included in the European taxonomy, we are taking the Geomelt[®] vitrification technology to an industrial scale for low- and medium-level radioactive waste."

JEAN-FRANÇOIS NOGRETTE, Senior Executive Vice President, France and Special Waste Europe, Veolia

Innovation focus



400,000 M³ OF WATER DECONTAMINATED SINCE MARCH 2011 AT THE FUKUSHIMA SITE

> By damaging the planet's ecosystems, human activities can endanger its ecological foundations. There is an urgent need to reduce air, soil and water pollution. Veolia offers a range of solutions to treat all types of pollution, including hazardous waste, industrial effluent and micropollutants. As a recognized player in the treatment of hazardous waste, degraded soil or soil polluted by heavy metals or organic compounds, Veolia has developed a solution adapted to each complex type of pollution. For air pollution, the company monitors and manages the air quality in tertiary

buildings: offices, hospitals, shopping malls, movie theaters, hotels, etc. Veolia also has unique expertise in the prevention and treatment of complex pollution. In South Africa, for example, the company manages hazardous waste from the Engen refinery in Durban, the country's second largest refinery. This site will be converted into a major terminal and storage facility for petroleum products by 2023. The treatment of nuclear waste requires a high level of expertise. Since March 2011, Veolia has been decontaminating and dismantling

the site of the Fukushima Daiichi nuclear power plant in Japan, which was hit by a tsunami that same year. To date, Veolia has decontaminated 400,000 m³ of water, removing more than 10 million curies of cesium and strontium as well as many other isotopes. Remotely operated robots dismantle the site and treat the waste. The progress made has enabled the development of effective long-term solutions. Veolia has developed the GeoMelt® technology for vitrifying nuclear waste, which transforms it into a stable and robust material. It has created the Waste2Glass joint venture with EDF to roll out this vitrification technology, which was honored at the World Nuclear Exhibition 2021 in December in Paris.

Veolia has long been concerned about plastic pollution in the seas and oceans. The Group is leading the **European** Mediplast project, which measures and identifies microplastics in four wastewater treatment plants in the Provence-Alpes-Côte d'Azur region in **France:** 50% of the microplastics present in wastewater are polyesters, partly from washing machine water; two-thirds are small (between 1 and 125 µm). At the end of the wastewater treatment plant process, this pollution is reduced by more than 99%. These results prove that other sources contribute to the pollution observed in

the Mediterranean Sea.



From the air, water is not always blue. But from space, it is possible to make many observations about how waterways are functioning. This is why Veolia's Open Innovation team is testing various satellite monitoring services for catchment areas on the basis of three criteria: detection of algae on water bodies, monitoring of catchments and pollution linked to agricultural practices.

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IMPROVING QUALITY OF LIFE



which is becoming one of the main markets in Central Asia, Veolia is going to upgrade the heating system of the capital, Tashkent. The contract includes fitting all homes with individual meters and separating the hot water from the heating circuits, as its design is a source of energy loss. This 30-year public-private partnership will generate cumulative revenue of €13.4 billion, and deliver a modern and energy-efficient system for the city's population.



feed by bioconverting organic waste from the fertilizers and organic agricultural and food fertilizers from biowaste. It is currently The principle is simple: being tested in the UK, fly larvae feed on Spain and Italy. This organic waste and are new fertilizer, which is then transformed into protein concentrate. These insect proteins replace fish meal for feeding farm animals. Veolia has successfully the soil. industrialized a first **bioconversion** site in Malaysia with the start-up Entofood and is building a second facility Veolia is partnering with the Norwegian company Yara to market a new fertilizer that combines mineral

health. The Group

is producing new

industries.

in France.

derived from the circular economy of bio-waste, uses less gas in its manufacture and returns carbon to In order to protect the people's health, Veolia is innovating in the field of epidemic monitoring. As pioneers in the detection and quantification of SARS-CoV-2 in wastewater, the Group and its partners-IPMC, IAGE and the Marseille Fire Brigade (France) have jointly developed the Vigie Covid-19 solution. Using PCR screening techniques, it identifies the presence of mutations in coronavirus variants, thus providing local authorities with an indicator for monitoring epidemiological trends in their area.

olia 2021 • 2022

€13.4 bn CUMULATIVE REVENUE FROM A 30-YEAR **PUBLIC-PRIVATE** PARTNERSHIP

Veolia develops targeted solutions in the areas of health, biodiversity, food and urban inclusion of the most vulnerable. At the heart of public health issues, the company detects and neutralizes pollutants in water and quantifies the presence of viruses in wastewater in real time. It revitalizes biodiversity and supports new virtuous agricultural practices, such as the production of animal proteins, aquaculture and urban agriculture. Finally, Veolia is creating tailored solutions to improve the daily lives of people without access to drinking water and sanitation services. This is the case in Saudi Arabia, where Veolia is becoming a strategic partner of the Kingdom to provide

drinking water and sanitation services to the nine million inhabitants of **Riyadh** and its region. In **Australia**, too, Veolia provides its expertise in wastewater treatment. After operating Gerringong-Gerroa wastewater system south of Sydney for twenty years, Veolia won a new fourteenyear contract from Sydney Water on the New South Wales coast. The 50 km network includes a wastewater treatment plant and 12 pumping stations. Treated effluent is reused for agricultural irrigation, and biosolids residue for composting. As with water, energy, too, is at the heart of the challenges facing major urban areas. In Uzbekistan,

"The launch of a new fertilizer. with Yara, is a concrete way to complete the nutrient cycle."

ESTELLE BRACHLIANOFF Chief Operating Officer for Veolia

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