

# CSR Pathways

In Africa and the Middle East



# Re-energising the World



Natural resources are dwindling and deteriorating at a time of ever-growing demand. As a result, the world is facing an ecological and social challenge: securing the right of inhabitants to access essential services against a background of scarce resources and climate change. Veolia wants to help make today's and tomorrow's world more sustainable. It aims to re-energise the world by coming up with solutions that can be rolled out to improve access to, preserve and replenish resources. Together with its many partners, our Group wants to build an economy with a lower environmental impact and a greater social impact, an economy that helps mankind without harming the environment.



**Antoine Frérot**  
CEO of Veolia

As a global leader in environmental services, we support cities and industries in Africa and the Middle East in their transformation towards a more frugal, more inclusive and less carbon-intensive economy. In every country in which we do business, our work ethic is about collaboration and sharing the added value created. This is our way of respecting our ecosystem and having a positive impact on the countries in which we operate.



**Christophe Maquet**  
Director of Africa  
and Middle East Zone



## Where global challenges overlap



The continent of Africa is going to see its urban population double. By 2050, it will have two billion inhabitants. Already, the average age of its population is 19 years old.

A new middle class is emerging in the region and industries are developing at a rapid pace.

The Middle East is a region of the world undergoing great change, where projects pose a challenge to human creativity and ingenuity.

It is our job to face up to these challenges. And our commitment is to respect all stakeholders in doing so.

# CSR, keeping score of our activities

Working in Africa and the Middle East for 21 years, we act as a catalyst for growth in that region and are helping industries operate in a more sustainable and resource-efficient way.

We are helping to build a circular economy model based on joint development, improved usage, recovery and recycling of resources.

A culture of entrepreneurialism and “frugal” innovation is very much alive in Africa. We are working alongside locals to create cost-effective and sustainable solutions to preserve water and energy resources.

We are also supporting the creativity of decision-makers in the Middle East, helping them to envisage a new sustainable world.

At this rate, by 2035, the Gulf countries will be consuming **8%** of the world's resources for **4%** of the population

By 2050, **2** Africans out of every **3** will be living in towns and cities

In the Gulf countries, domestic water consumption is the highest in the world with an average of **550** litres of water/day /inhabitant



In keeping with the Veolia Group's 9 commitments to sustainable development, our day-to-day work helps achieve the UN Sustainable Development Goals (SDGs) in a tangible way.

<b>2</b> ZERO HUNGER 	<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>4</b> QUALITY EDUCATION 	<b>5</b> GENDER EQUALITY 	<b>6</b> CLEAN WATER AND SANITATION 	<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>15</b> LIFE ON LAND 
<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<b>10</b> REDUCED INEQUALITIES 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	<b>13</b> CLIMATE ACTION 	<b>14</b> LIFE BELOW WATER 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 	<b>17</b> PARTNERSHIPS FOR THE GOALS 

**SUSTAINABLE DEVELOPMENT GOALS**



## Committing to the planet...

...By promoting the circular economy to manage natural resources in a sustainable manner

The circular economy is an effective solution for preserving and replenishing water, energy and material resources in a given region. Replenishing these resources may involve recycling materials (plastic, paper, glass, precious metals), developing renewable energy and energy recovery systems (biomass, biogas, unavoidable energy, etc.) and transforming waste into compost or energy. Through our work in Africa and the Middle East, we are helping to gradually replace the traditional linear model (make-use-discard) with a new circular economy model based on collaboration.

6 CLEAN WATER AND SANITATION



### Giving new life to treated wastewater in Namibia

Even today, the capital city of Namibia is one of the only cities in the world to recycle its domestic wastewater into drinking water on a large scale. The Windhoek wastewater treatment plant was the first to develop this process.

Since 2002, Veolia and its partners have been managing the plant, which recycles wastewater into drinking water for more than 350,000 inhabitants. Besides increasing the quantity of drinking water available, recycling wastewater also offers a double benefit to the environment: it avoids the use of natural resources while significantly reducing pollutant release.



### Reusing 100% of wastewater from Ajman in 2020

Currently in Ajman, United Arab Emirates, nearly half of treated wastewater is reused for irrigation, watering parks, gardens and recreation areas, and as process water for industry. We plan to recycle all wastewater from the capital of the Emirate of Ajman in 2020. This local loop of the circular economy enables Ajman to preserve a large proportion of its water resources. The process also saves 6,000 tonnes of CO<sub>2</sub> emissions annually.

### Working with the Moroccan Association for a Sustainable Environment (AMED)

The objective is to strengthen cooperation between Amendis and AMED to promote sustainable development in the northern region of Morocco. This partnership has led to some beneficial initiatives. For example "We are the first region in Morocco to use treated wastewater for watering public green spaces, as part of the REUSE project" says Mr Chouhaid Nasr, Managing Director of Amendis.

## Committing to the planet...

Global greenhouse gas emissions will need to drop by

# 70%

between now and 2050



13 CLIMATE ACTION



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## ...By helping combat global warming

To limit global warming to +2°C, global greenhouse gas emissions will need to fall by 70% between now and 2050. Based on these observations, Veolia has upped its commitment to being a low-carbon company, i.e. generating low levels of carbon dioxide (CO<sub>2</sub>) emissions. This will help reduce or even avoid greenhouse gas (GHG) emissions. Within the regions of Africa and the Middle East, in countries where water resources are scarce and where global warming is already having a significant impact, we are helping to combat global warming by developing clean energy production techniques and through the desalination of seawater.

### Desalinating seawater in Oman

In arid regions, such as the Middle East, the availability of water is an important issue, and it is very difficult to meet local water needs through traditional resources.

Sharqiyah Desalination Company SAOC (SDC) owns and operates the Sur Desalination Plant in Oman, a unique world-class solution for the Ash-Sharqiyah region.

SDC helps combat the depletion of the region's limited groundwater resources by treating more than 200,000 m<sup>3</sup> of seawater per day from its unique beach-well catchment, the largest in the world.

SDC produces 80,000 m<sup>3</sup> of drinking water per day through a highly energy-efficient reverse osmosis process, recycling more than 97% of mechanical energy and saving up to 40% more energy compared to a conventional reverse osmosis system. The plant's state-of-the-art facilities also eliminate the need for chemical pretreatment and ensure minimal impact on the marine and coastal environment.

## Industrial waste-to-energy facility in Saudi Arabia

The Sadara/Veolia agreement follows a memorandum of understanding signed earlier this year and solidifies plans to provide long-term waste management solutions for Sadara, while enabling Veolia to generate steam as a by-product. Veolia will also build cooled and compressed air facilities, all of which will be made available to manufacturing plants downstream of the PlasChem Park industrial area. "This project is a key milestone for the development of Veolia in the Kingdom of Saudi Arabia and the journey towards a circular economy. The long-term partnership with Sadara is paving our 'industrial symbiosis' path, a model in which resources and energy are recycled and recovered, and it will bring the most advanced technologies to support the growth of PlasChem Park", said Sebastien Chauvin, CEO of Veolia Middle East.

## Tailor-made solar photovoltaic solutions to reduce energy costs with Enova

In the Middle East and North Africa, buildings are constantly exposed to sand and dust and high levels of solar radiation throughout the year. Enova's mission is to preserve the environmental resources of towns and cities for generations to come. Enova supports its customers' sustainable development strategies by providing them with innovative sustainable energy solutions and by guaranteeing and improving their performance. As part of an Energy Performance Contract (EPC), Enova leverages photovoltaic solar power plants as an effective solution to complement Energy Conservation Measures (ECM), reducing costs in terms of energy consumption and contributing to energy balance. Enova provides tailor-made solar photovoltaic solutions that integrate the specific constraints and capabilities of each building and its environment, while scrupulously respecting local regulations and customer requirements.

## Committing to the planet...

...By preserving the natural capital of the countries in which we operate

By sustainably supporting the regions in which we operate we can also help protect the world's biodiversity. We do this by reducing the impact of our activities and those of our customers on nature, but also by creating favourable conditions for the preservation and restoration of species and their habitats.

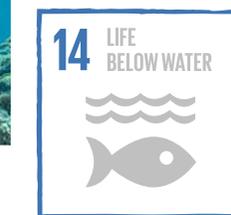
### Cleaning up the Moroccan coastline

By taking part in the annual "clean beaches" operation organised by the Mohammed VI Foundation for the Preservation of the Environment in Tangier, Amendis confirms its resolution to protect the beaches of Morocco. In 2018, for the sixth year in a row, the company obtained the "Blue Flag" label for the Ba Kacem beach. The Tangier pre-treatment plant is one of the most important purification facilities in the Tangier area. In Skiriat too, Redal is working to improve the quality of the beaches and coastline. This is part of the global shoreline clean-up programme aiming to improve the inhabitants' quality of life.



### Protecting the ecosystems around our plants in Oman

In addition to brine discharge compliance, Veolia's CSR policy has led to an ex-post assessment of the environmental merits of the initial design. The results showed that the physical environment was crucial for improving fish biodiversity. Since 2007, Bahwan-Veolia has been operating a reverse osmosis seawater desalination plant in the city of Sur, Oman. We have identified 82 species of tropical fish and coral reef species in the test site around the brine discharge facility, while in the two nearby control sites the number of species rarely exceeded 8, due to a poor environment offering no shelter. Turtle conservation efforts have been deployed in Sohar and Sour, with operators trained to recover turtles trapped in the seawater intake and carefully release them.



In Sur, in 10 years, the water intake and brine lines have turned into an artificial reef, as shown by the study conducted 3 years ago by Seureca (consulting engineers).

In Ajman, the introduction of wetlands has resulted in the emergence of 117 bird species, including rare species such as the egret, the white pelican and the red-crested pochard (respectively 5th, 8th and 14th according to UAE archives). At ASPCL, our not-for-profit Community Care Foundation is dedicated to the protection of wetlands, biodiversity and the environment, where we continually look for ways to make the community a cleaner, greener and more prosperous living space. In line with our strategic objectives, we aim to raise awareness in the community about water consumption and waste management in Ajman.

Helping protect the world's  
**biodiversity**



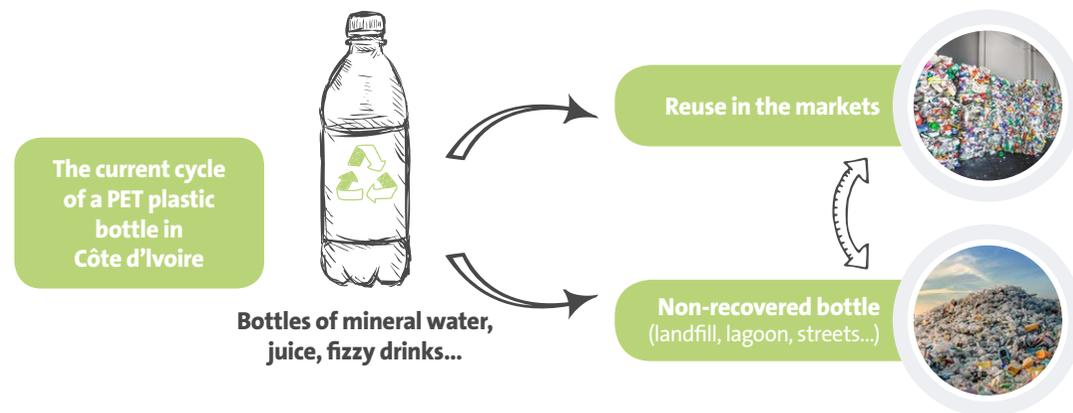
### Ensuring environmentally-friendly industrial water treatment in Ghana

Through our subsidiary Veolia Ghana Limited, set up in 2014 in partnership with AngloGold Ashanti, we operate and maintain the water treatment plant at the Iduapriem mine in Ghana. This mine is subjected to extreme temperature variations, with alternating dry and wet periods. Essential to the mining industry, water is used in various activities such as ore processing, dust removal, slurry transportation and personnel needs. Through this subsidiary, we commit to responsible water management, guaranteeing zero impact on local and regional water resources (in particular the issues associated with the use of cyanide). By ensuring compliance with Ghana's effluent requirements, we provide environmentally-friendly water and waste treatment.

# Committing to the regions...

## ...By building new relationship and value creation models

In Africa and the Middle East, we are helping boost the regional economy. How? By reinvesting most of our expenditure in the local economy. In other words, we are sharing the value we create. In Africa, our goal is to provide solutions that improve the regulatory, societal and environmental performance of our customers. We achieve this by interacting with all the players in the region to innovate and work collaboratively on creative, shared-value initiatives.



## Setting up a PET recycling scheme in Côte d'Ivoire

In Abidjan, Côte d'Ivoire, our innovative pilot "Africwaste" is assessing a possible system for the local recycling of PET plastic bottles. By working with unofficial waste workers (collectors, private individuals, traders, etc.) AfricWaste's proposal involves collecting the "wasted" stream of PET bottles that the unofficial sector can not reuse (bottles that are broken, pierced or crushed) and then recycling them.

During this 6-month pilot phase, 15 tonnes of PET were collected monthly. A second pilot phase was conducted between March and September 2018 in the district of Treichville. A smartphone app is used to arrange collection. The ultimate goal is to measure available PET streams to determine the feasibility of recycling them locally to supply local industries with recycled PET.



# 400 million

*inhabitants in rural areas have no access to drinking water in Africa*

# Committing to the regions...

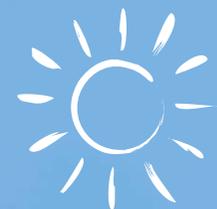
## ...By supporting the development of infrastructures for sustainable towns and cities

Towns and cities in emerging countries have huge infrastructure requirements. To make cities more sustainable, Veolia draws on 165 years of know-how in environmental services and comes up with cross-sectoral (water-energy-waste) solutions to meet the complex challenges of new urban developments. In the Middle East we are helping city managers implement digital solutions that enable smarter, simpler and more flexible management of commercial buildings.

## Cleaning up the Atlantic coastline in Rabat and Salé, Morocco

As part of a major project to clean up the Atlantic coast and the Bouregreg Valley, we have developed a system for cleaning up the cities of Rabat and Salé, one that protects the environment and brings economic and tourism growth to the region.

The wastewater treatment process helps protect the environment by controlling discharges into natural environments. This system helps improve the quality of bathing water, benefitting both inhabitants and the environment.



## Helping reduce the carbon footprint of urban spaces: Saadiyat Island

Saadiyat Island is a 27-square-kilometre area undergoing development to become the cultural and tourist destination of the Emirate of Abu Dhabi. Veolia's expertise in the management and overall operation of energy assets is helping to reduce the environmental impact and carbon footprint of Saadiyat Island. Measures include the provision of a highly-efficient urban cooling system using thermal energy storage and treated wastewater to supply water for the cooling tower circuits.



# Committing to the regions...

## ...By providing essential services for health and human development



Together with all local stakeholders and drawing on our technical know-how, we are working to improve access to drinking water and cleaner energy. Providing access to these basic services improves the living conditions, health and economic development of the cities and regions in which we operate.

### Inventing smart meters in partnership with CityTaps in Niger



SEEN has partnered with CityTaps, a start-up company whose mission is to bring clean drinking water to every home, to improve the health of the most disadvantaged residents. CityTaps has developed a unique solution for SEEN: a groundbreaking smart water meter with a prepayment service that allows customers to pay for their water up front using their mobile phone for any amount. This solution gives customers the option to manage payments as they wish, offering seamless access to the service.

### Supporting "Health Caravans" in Morocco

For many years, Amendis and Redal have been supporting the use of medical caravans, through a partnership with the "Colombe Blanche" association and the Health Delegation. Having already provided care to more than 40,000 disadvantaged citizens, these caravans travel around several of the outlying districts of Tangier, Tetouan and Rabat to reach as many people as possible every week. They provide the local populations with access to consultations, medical check-ups, preventative care and free medical tests.



## Committing to men and women...

...By contributing to the social and economic development of local populations

Veolia supports towns and cities in Africa and the Middle East by providing them with solutions that help improve access to, preserve and replenish resources, thereby increasing their environmental, economic and social efficiency. In Africa, our services cannot be relocated, they are produced where they are consumed. In return we have the responsibility of sharing the value we create with local populations and stakeholders.

### Creating L'Oasis, in Niamey



In light of the many environmental challenges and of extreme poverty, which affects women first and foremost in Niger, Veolia, its foundation and La Recyclerie (a third place dedicated to eco-responsible actions) have created, in collaboration with Empow'Her – an association supporting women's entrepreneurship and recycling – a new concept: L'Oasis, in Niamey. It is a third place with a dual ambition:

- To support the economic integration of women through entrepreneurship
- To raise awareness of the issues related to sustainable development

With the support of the Société des Exploitation des Eaux du Niger (SEEN), L'Oasis celebrated its first anniversary in February 2019 having supported over 680 women and educated 2,500 people in one year, and set up a community vegetable garden for the employees of SEEN.

L'Oasis is laid out into various workplaces (offices, gardens, workshop spaces, etc.); it also generates jobs through its incubator and its support and training programmes for female entrepreneurs.



### Investing in children: extracurricular support in Morocco

Through citizen actions spearheaded by Redal in 2018, the company has focused on combatting school dropout rates. In partnership with local associations, the creation of programmes that include taking full responsibility for the schooling of over 300 children from disadvantaged families,

and "operation schoolbag", which handed out 1,000 schoolbags to children from disadvantaged families through over 20 associations in deprived neighbourhoods of Rabat, Salé, Skhirat and Témara, confirms Redal as a company committed to the local populations.

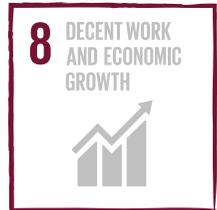
50% of the African population is under 18



## Committing to men and women...

### ...By ensuring a safe and healthy work environment

Prevention in health and safety matters is a top priority for Veolia in all its activities. From Africa to the Middle East, we are committed to ensuring the physical and psychological integrity of our workers. This is reflected in our very good accident frequency and severity rates. (FR 2018: 1.47, SR 2018: 0.03).



Actively involved in ongoing occupational health and safety programmes, dedicating one week each year to workplace safety, our plants and sites have received numerous certifications reflecting the involvement of teams in this area and the effectiveness of our initiatives for continuous improvement. For example:

- Amendis is ISO9001 certified for its Quality Management System, but also has ISO14001 certification for the Tangier Pretreatment Plant and the Boukhalef drinking water treatment facility. Amendis also has CAP 26000 certification.
- In Morocco, Redal also has ISO9001, ISO14001 and OHSAS18001 certifications.
- The Goudel plant in Niger is ISO9001 and ISO14001 certified.
- Enova's activities in the Middle East have received multiple certifications, including: ISO14001, ISO9001, ISO55001, ISO500001 and CSR labels.



### ...By being an employer of choice

Veolia's performance depends partly on its ability to attract and retain talent. We have prioritised skills training, career development and diversity because our prosperity and strength lies in the motivation and commitment of our workers. The skills and know-how of our workers are our company's main assets. To ensure their employability, we train them continuously. We are proud to be able to guarantee good living, working and professional development conditions for our employees wherever they are and regardless of their level of seniority.

#### Valuing local talent in Oman

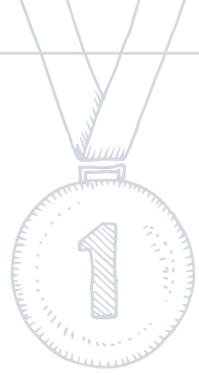
The nationalisation of talent and the development of skills is a key issue in Oman. Over 80% of our employees are locals and ambitions to employ Omani people are set high.

#### Supporting equality in Morocco

In 2018, Amendis launched the "Women's Leadership Plan" training course, in partnership with the International University of Rabat. This training aims to offer women in the company the opportunity to develop their leadership skills and ability to influence.

We have 8,500 workers, including:





# Commitments recognised by stakeholders

In every region of the world in which we do business, our work ethic is about collaboration and sharing the added value with our eco-system. Our activities enable our customers to embark on sustainable and circular pathways.



**The quality of our monitored and managed actions are also recognised by third parties, over and above certifications.**

- Amendis received the 2018 “Corporate Citizenship” award at the CSR Challenges awards in Morocco, commending its sustainable and concrete societal commitment.
- Redal was awarded customer service of the year 2019 in the Energy category: this Label highlights the efforts made in customer relations, and increased proximity thanks to a massive digitalisation project.
- Veolia Africa won the 2018 “Best Energy Project” award for its Guinea Electricity Management Contract, at the Africa Investments Forum & Awards. This award commends the consistency and quality of the investment, its progress over the last 3 years and the capacity for innovation and CSR vision.
- For the sixth year in a row, Enova won the CSR label from the Dubai Chamber of Commerce and Industry. This recognition also came with a certificate of appreciation for the actions carried out by the company in 2018 to promote corporate social responsibility and sustainable development.
- For the sixth consecutive time, Veolia Middle East was also awarded the CSR label from the Dubai Chamber of Commerce and Industry.



Resourcing the world