



**Providing innovative
environmental solutions in
waste, energy and water**

Middle East



The big picture

Today, we are experiencing some of the most significant environmental challenges we've ever faced, from rapid urbanization to scarcity of natural resources and climate change.

Resourcing the world

Veolia is the global leader in optimized resource management. When it comes to managing utilities and resources, Veolia is the only company in the Middle East that works across the whole spectrum of environmental services - a unique service that we're proud of being able to provide. We're at the forefront of technology, creating innovative solutions to develop access to resources, preserve and replenish them.

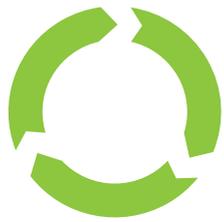
We can make a difference to you too

In the Middle East, Veolia works with industries, governments and communities as well as retail and commercial businesses to deliver innovation and sustainable solutions that are needed today, with the vision required for tomorrow. Our unique expertise, technological capabilities and group synergies will help you to create smart ways of meeting today's challenges. By combining our strengths with yours, we can work in harmony, maximizing our use of precious resources and reducing the impact we all have on our planet.

Strengthened by dynamism and long-term economic growth of the region, decision makers in the Middle East are implementing new infrastructure development policies. Through public-private partnerships and innovative contractual schemes, Veolia is committed to achieving quantifiable results with sustainable, pragmatic environmental solutions.

Key figures

- More than **2,000** references
- **20** operational sites with a variety of contractual schemes
- **3,113** employees
- Over **30** years of experience in the Middle East
- Delivering services for Industrial, Municipal & Commercial markets
 - Infrastructure (DBO, BOOT, PPP, IWP, O&M)
 - Performance Contracts



Waste Management

You may not realize it, but every year, less than a quarter of the waste that is produced worldwide is recovered.

Veolia is the benchmark for sustainable **waste management**, resource recovery and industrial solutions, providing fully integrated waste and recycling solutions to a broad range of clients.

Activities

- Waste management and logistics for local authorities and companies (maintenance, cleaning, sewer cleansing, collection and transfer)
- Specialist sorting, treatment and recycling services for hazardous & non-hazardous waste by incineration, composting, landfilling & physical-chemical treatment
- Production of energy, organic and raw materials from waste
- Construction & demolition waste services
- Medical waste management

Global key figures

- **39** million people provided with collection services on behalf of municipalities
- **553,500** business customers
- **42.9** million metric tons of treated waste
- **601** waste processing facilities operated

Integrated waste management program,
Saadiyat Island, UAE



Hazardous waste management services,
Borouge, UAE



Energy Management

With climate change, rising energy prices and increasingly scarce resources, energy efficiency is now on top of the agenda for Middle East businesses.

Our approach is to combine an array of offers and options to build custom solutions for our customers. Whether you're looking to save energy or need someone to invest in and manage your energy infrastructure, we can use our synergies to help you find the right solution.

We design, build, operate and maintain **energy solutions** that can decrease your overall consumption of energy, and **reduce long-term utilities expenditure**. This includes the management of district cooling networks, energy plant engineering and maintenance services, technical services for commercial and industrial building operation and comprehensive building services towards **smart energy management**.

Activities

- » Energy and climate conditioning (heating and cooling) services
- » Heating and cooling networks
- » Industrial utilities
- » Comprehensive integrated building management services
- » Climate control and power equipment installations and industrial maintenance
- » Performance contract and energy savings approach

Global key figures

- » **779** heating and cooling networks managed
- » **53** million MWh produced
- » **3.4** million collective housing units managed
- » **2,027** industrial facilities managed

District Cooling on Saadiyat Island,
Abu Dhabi, UAE



Energy Management Operations,
Mall of the Emirates, Ski Dubai, UAE



Water Management

As pressure on fresh water resources increases, we all need smart ways to reduce our water footprint and adopt a 'blue growth' strategy for the future.

Whether you're concerned about scarce water resources or want to maximize efficiency and minimize your water consumption, you can rely on our water experts for some smart solutions.

We manage assets of the water cycle, including **reuse** and **desalination** solutions and design, build and operate advanced water and wastewater treatment plants. We focus on client needs to maximise reuse of water and **minimize impact on the local environment and waterways**. We have a commitment to the environment and the communities in which we serve.

Activities

- ≡ Management of water and wastewater services for municipal and industrial clients
- ≡ Design/build of technological solutions and facilities necessary to deliver water and wastewater services
- ≡ Consulting and peer performance solutions

Global key figures

- ≡ **100** million people supplied with water
- ≡ **63** million people connected to wastewater systems
- ≡ **4,245** water production plants managed
- ≡ **3,303** wastewater treatment plants managed



Design, built and operate (DBO) contract at Az Zour South Desalination Plant, Kuwait



Non-revenue water project, PAEW, Oman



Operations & Maintenance of wastewater treatment plant in Al Wathba, Abu Dhabi, UAE



UAE, Ajman

- 25-year concession and O&M contract
- 50,000 m³/days wastewater treatment plant serving 250,000 population equivalent + customer services including collection and billing (3 front offices)



UAE, Fujairah

- The largest hybrid desalination plant in the world
- 12-year O&M contract
- A capacity equivalent to 591,000 m³/day of drinking water



Bahrain, Bahrain Bay

- 50-year BOT (build-own-transfer)
- Central district cooling system and sewage treatment plant



UAE, Dubai

- Etihad ESCO contract to deliver energy saving solutions to:
 - DEWA, 6-year contract started in 2015
 - JAFZA, 6-year contract started in 2016



KSA, Jubail

- O&M of Industrial Waste Water Treatments Plants for:
 - Sipchem since 2009
 - Kemya (ZLD)

Some of our key references



Lebanon, Beirut

- 5-year O&M management contract for the City Centre Beirut (CCBe)
- Around 160,000 m² shopping mall
- 16MW Power Plant capacity and 4,500 TR Cooling Plant capacity



Oman, Khazzan

- Raw water treatment plant for BP Khazzan
- DBO + 1 + 5 year O&M contract signed in 2014



Qatar, Doha

- 7-year O&M contract
- 2 sewage treatment plants with a capacity of 112,000 m³/day,
- Serving 460,000 people equivalent



UAE, Abu Dhabi

- Since June 2014
- 3-year O&M contract
- Waste Handling, Transport and Disposal Services of Ruwais Polymers Plant

5 Promising sectors to explore

Difficult-to-manage materials

Low-level radioactive waste, chemical products and hydrocarbon derivatives, etc.: as certain types of waste are hazardous for human health and the environment, high level expertise and non-standard equipment are needed for their treatment.



Oil and gas

The oil and gas industries sit at the crossroads between major regulatory, societal, economic and operational challenges. Veolia helps ensure extraction is handled in an environmentally friendly manner.



Innovative solutions for cities

Constantly growing in size and under financial stress, cities must optimize the management of their public services. As a partner of cities, **we are inventing new, more efficient models.**



Circular economy

A sustainable alternative to the current production and consumption approach, the circular economy is already a reality. Industrial companies and local government authorities are starting to produce alternative resources and local supply loops are emerging.



Mining industry

For economic, regulatory and environmental reasons, mining effluent treatment is a major challenge.



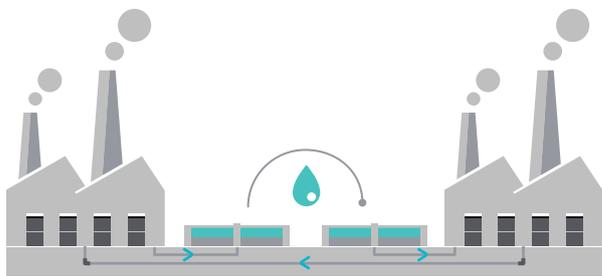
8 ways to resource the world

GIVE WATER SEVERAL LIVES

Reintroducing wastewater into agricultural and industrial production cycles, and even domestic consumption, is one solution for overcoming water shortages and the growing cost of treatment. Worldwide, Veolia provides tailored solutions for each need and each resource typology. In Qatar and Canada, we have installed closed loops for oil group Shell enabling almost 100% of the wastewater produced to be reused.

100%

of wastewater is reused



GENERATE AWARENESS OF SCARCITY

Water is a precious commodity. Saving it, conserving it, multiplying its uses and sharing it better are becoming crucial. However, no sustainable and rational action is possible without solid knowledge of the state of the resource. For this reason, Veolia has developed three tools to help states, cities and industry measure resources and help with their decisionmaking: Growing Blue Tool, Water Impact Index and True Cost of Water are designed to improve the assessment of footprints and help take more appropriate action (www.growingblue.com).

40%

of the world's population lives in regions suffering water stress



ADVANCED RECYCLING

Waste Electrical and Electronic Equipment (WEEE) is increasing three times faster than household waste. Poorly treated, it is becoming a real scourge. In Angers (France), Veolia has a high-performance plant for dismantling WEEE and recovering the plastics extracted from this waste. It has created a closed loop for the recovery of plastics in order to meet the needs of French manufacturers.

THE FUTURE FOR BIOMASS

With the promise of a fine future, biomass is both a source of renewable energy and fertilizer used to improve and revitalize soil. At Fort Saint James (Canada), we have designed and are operating one of the country's largest biomass power plants fuelled with waste from the local forestry industry. It will provide electricity to nearly 40,000 households and avoid the annual emission of around 95,000 metric tons of CO₂ – the equivalent of more than 45,000 cars off the road.



45%

of waste will be reused and recycled by 2015

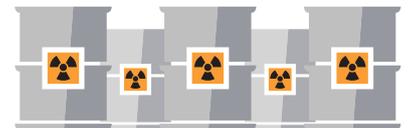
FROM LANDFILL TO RECOVERY

Make everything a source of materials recovery. For Veolia, landfilling waste is not the end of the story. After extracting the best of each type of material in the waste, the fraction that is no longer recyclable can still serve a purpose. At Woodlawn (Australia), a former copper mine has been converted into a landfill and is now equipped with the latest technology for organic and energy recovery from waste.



NEUTRALIZING HAZARDOUS PRODUCTS

Certain types of hazardous and toxic waste pose a serious and lasting threat for human health and the environment. Veolia has developed unique expertise for recovering and reusing hazardous waste. In Berne (Switzerland), we built the world's first plant to isolate the mercury contained in industrial catalyzers and spent activated carbon, recovering it in a 99.9% pure liquid form. With all traces of mercury removed, the catalyzers and active carbon can be reused.



Pollution removed from

1,000

metric tons of catalyzers a year

72%

of the Earth's surface is covered with water



SEAWATER DESALINATION

Seawater desalination provides a precious alternative resource. The world leader for desalination, we have extensive expertise in the very latest filtration technology and are working actively on limiting its ecological footprint, in particular through the use of renewable energy. In Jubail (Saudi Arabia), we have built and manage the country's largest ultrafiltration and reverse osmosis desalination plant that supplies the Sadara petrochemicals complex.

97%

of this water is salty

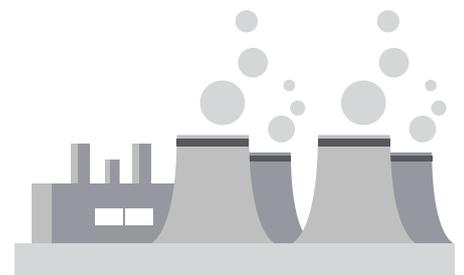
MULTIPLE USES FOR WASTEWATER SLUDGE

For Veolia, wastewater sludge is no longer a waste product; it can be used in a real circular economy. In Denmark, the wastewater treatment plant of the future, the Billund BioRefinery, will convert wastewater sludge and organic waste into biogas for local consumption, organic soil improvers for agriculture, and bioplastics.



6,800 MWh

of electricity generated each year at the plant



9 commitments to ensuring sustainable development

For resourcing the planet

2020 target: roll out our new internal Environmental Management System for all our operational activities. 2015 performance: 25.4% of consolidated revenue from ordinary activities covered.

1

Sustainably manage natural resources by supporting circular economy

2020 TARGET

- Achieve over €3.8 billion in revenue linked to circular economy.

2015 PERFORMANCE

- €3.5 billion (estimated).

2

Contribute to combating climate change

2020 TARGETS

- Capture over 60% of methane at the landfills we operate.
- Achieve 100 million metric tons of CO₂ equivalent of reduced emissions and achieve 50 million metric tons of CO₂ equivalent of avoided emissions for the period spanning from 2015 to 2020.

2015 PERFORMANCES

- 57% of methane captured.
- 16 million metric tons of CO₂ equivalent of reduced emissions and of 6 million metric tons of CO₂ equivalent of avoided emissions.

3

Conserve and restore biodiversity

2020 TARGET

- Perform a diagnosis and deploy an action plan at all sites identified as having significant importance for biodiversity.

2015 PERFORMANCE

- Diagnosis and deployment at 30.6% of sites identified.

For resourcing region

4

Build new models for relations and value creation with our stakeholders

2020 TARGET

- Enter into a major partnership based on value creation in each zone and each growth segment.

2015 PERFORMANCE

- Examples of major partnerships signed: Danone, IBM and Takeei.

5

Contribute to local development and the attractiveness of regions

2020 TARGET

- Maintain above 80% the share of our expenditure reinvested in regions.

2015 PERFORMANCE

- 83.9% (average calculated for the main geographic regions representing almost 70% of 2015 revenue).

6

Supply and maintain services crucial to human health and development

2020 TARGET

- Contribute to the sustainable development goals adopted by the United Nations General Assembly in September 2015, in the same way that we contributed to the Millennium Development Goals.

2015 PERFORMANCE

- Since 2000, more than 6.5 million people have been provided with drinking water supply and more than 3 million with sanitation in countries with underdeveloped access.

For the women and men we employ

7

Guarantee a healthy and safe working environment

2020 TARGET

- Achieve an injury frequency rate of 6.5 or below.

2015 PERFORMANCE

- Frequency rate: 11.02.

8

Encourage the professional development and commitment of each employee

2020 TARGETS

- Provide at least one training session during the year to over 75% of employees.
- Maintain management's commitment rate at over 80%.

2015 PERFORMANCES

- Percentage of employees attending at least one training session: 75.5%.
- Management's commitment rate: 86%.

9

Guarantee respect for diversity and human and fundamental social rights within the company

2020 TARGET

- Ensure more than 95% of employees are protected by employer-employee dialogue arrangements.

2015 PERFORMANCE

- Percentage of employees covered: 90%.

Resourcing the world

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