SUEZ solutions for sustainable tourism
shaping resourceful cities through smart data management
SUEZ, a global leader in smart and sustainable management of resources
SUEZ,

Innovative solutions for smart and resourceful cities

Smart & sustainable management of the water cycle, smart water solutions

Recycling and waste recovery to produce new resources, secondary raw materials and energy

Engineering, design and construction of treatment infrastructure

Innovative solutions for smart and resourceful cities
A world leader in the smart and sustainable management of resources, we help cities and industries optimize water management, recycling and waste recovery.

**SUEZ at a glance**

- **employees**: over 90,000
- **operating on**: 5 continents
- **industrial and business customers**: over 450,000
- **turnover in 2016**: €15.3 billion

**Consolidated figures including GE Water & Process Technologies as of December 31, 2016**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water produced (worldwide)*</td>
<td>5.3 billion cubic meters</td>
</tr>
<tr>
<td>Drinking water distributed (worldwide)*</td>
<td>3,162 million cubic meters</td>
</tr>
<tr>
<td>Waste water recycled (worldwide)*</td>
<td>882 million cubic meters</td>
</tr>
<tr>
<td>Waste water depolluted (worldwide)*</td>
<td>92%</td>
</tr>
<tr>
<td>People benefiting from waste collection services*</td>
<td>34 million people</td>
</tr>
<tr>
<td>Waste treated*</td>
<td>41 million tonnes</td>
</tr>
<tr>
<td>Hazardous waste treated*</td>
<td>2.9 million tonnes</td>
</tr>
<tr>
<td>Recovered material from sorting centers*</td>
<td>10.4 million tonnes</td>
</tr>
</tbody>
</table>

*Data as of 31/12/2016 without GE Water*
Long-term privileged relationships with numerous high-level scientific and technical actors to strengthen & speed up innovation all over the world.

**Academic partnerships** (University of Bordeaux, University of Barcelona, CNRS, University of Tsinghua, Harbin Institute of Technology, Chinese Academy of Science, etc.)

**International network** (the Global Water Research Coalition (GWRC), Water Supply and Sanitation Technology Platform, Climate-KIC).
our contribution to sustainable tourism
what we do for sustainable tourism

Shaping resourceful cities through smart data and circular management.

manage resources for ensuring the well-being of urban dwellers and ensure cities’ attractiveness

Facing the increased touristic competition between cities throughout the world, changing consumer behaviors, pressure on resources and climate change risks, SUEZ plays a key role in guaranteeing and optimizing the availability and quality of environmental resources.

innovate with all our partners to accelerate the transition to sustainable tourism

As an international player in the field of environmental services, SUEZ is present in various touristic cities in the world, notably in Spain. Apart from optimizing the management of environmental resources to increase urban attractiveness, the Group develops products and services dedicated to improving the experience of travelers in the cities.
our solutions for ensuring the well-being of urban dwellers and ensure cities’ attractiveness
At SUEZ, we work side by side with cities and support them in meeting their challenges of urban development and attractiveness, by addressing climate change risks.

as of today

- **2138** private sector companies have taken climate-related commitments
- **749** cities, representing more than 681 million people worldwide have committed to the Global Covenant of Mayors for Climate & Energy
remote metering: making water management increasingly smarter

3 million
smart sensors sold

27,495 km
of networks monitored

21% of customers
equipped with remote reading meters
SOLUTION

- **Aquadvanced™**, is an innovative and modular SaaS solution that allows operators to efficiently manage supply networks, reducing operating costs, controlling water quality and optimizing water and energy consumption.
- Efficiently managing drinking water networks requires processing a large amount of data, with information from multiple sources and systems (SCADA, sensors, GIS, etc.).
- **Aquadvanced™** collects, treats and analyzes all this data and makes it an aid essential for decision making, providing a simple view of network performance in real time.

BENEFITS

- It offers advanced management of “events” (leaks, breaks, pressure drops, abnormal consumption ...) to detect and identify anomalies and their causes, locate them accurately and perform a detailed follow-up.
- Analyze the hydraulic behavior of the network to predict the risks of failure and simulate the impact of interventions.
- Continuous monitoring of water quality, as well as the energy efficiency of the distribution network, providing optimal operation strategies.
- It is a smart solution designed to respond to the new challenges that cities face.
- It protects the environment: saves water and energy.
- It allows better and greater communication with citizens: transparent management of water services.

WEB ACCESS

COMPATIBLE WITH MOBILE DEVICES

- **EVENT MANAGEMENT AND INCIDENTS**
  - Management of hydraulic incidents in real time
  - Location of events on map
  - Detection of anomalies and analysis

- **DISPLAY ON MAP**
  - Network cartography
  - Real-time display of sensor data
  - Calculation of the ANR at sector level (DMA)

- **INTUITIVE AND SIMPLE INTERFACE**
  - Web access, mobile devices
  - Total connection with SCADA’S, GIS, BD of assets, historical data
  - Customized hierarchical display

- **CUSTOMIZED REPORTS**
  - Advanced customized reports
  - Workspace open to multi-variable evaluation
The RESCCUE project aims to help urban areas around the world to become more resilient to climate change.

RESCCUE will analyze an interconnectedness of different urban systems, taking as starting point the water sector.

This sector has been highlighted due to the importance of water-related risks in the correct functioning of a city: droughts or heavy rains can produce critical impacts on strategic urban services such as water supply, solid waste, telecommunication, energy supply, transport, etc.

In order to interconnect the several sectorial models, the project will take advantage of the existent HAZUR® tool.

The HAZUR® approach is based on a method and software (as a service) to help city decision makers and urban resilience professionals make fully informed and structured choices to make their cities more resilient analyzing the interdependencies between different city services, monitoring the city and simulating cascade effects in case of impacts that may affect the city.

RESCCUE will provide innovative models and tools to improve the ability of cities to withstand and recover quickly from multiple shocks and stresses and maintain continuity of services.

An end-users – city managers and urban service operators – oriented toolkit will have the capability to be deployed to different types of cities, with different climate change pressures.
our ambition

innovate with all our partners to accelerate the transition to sustainable tourism
At SUEZ, we mobilize the resources offered by the digital revolution to provide new water-focused solutions in the field of smart tourism.
Coastal water management: iBeach

**CHALLENGES**
- Preserving the quality of bathing water
- Addressing health concerns of users and public authorities
- Preventing pollution to protect natural environments

**SOLUTION**
- Decision support system to monitor and forecast bathing water quality through automatic, real-time data collection
- Assessment of the nature of polluting events and estimation of their duration, warning system using sensors
- Innovative communication system with residents: the application iBeach

**BENEFITS**
- Forecasting and prevention of pollution allowing to preserve natural environments
- Important tourism tool for coastal towns due to the comfort and convenience of a digital app for users
Dinapsis Operation & Lab in Benidorm

SOLUTION

• Dinapsis Operation & Lab is aimed at supporting Benidorm in the transition towards more sustainable touristic practices, while the city is particularly exposed to the seasonal variation of water demand due to mass tourism.

• It is based on 3 focus areas:
  o Smart Water: development of solutions to enable real-time response to the variation of water demand;
  o Smart Environment: guarantee of the continuity and quality of water supply to both citizen and the tourist;
  o Smart City: promotion of safe and intelligent cities, where initiatives are facilitated within an entrepreneurial and collaborative ecosystem between private sector, universities, an administration.

CURRENT PROJECTS

• Currently, the center is working on 3 different projects:
  o Water Track: a tool that allows citizens to monitor their water consumption
  o Drops: localization devices for children that use the network of smart meters without costs for communication in order to know their exact location and thus avoid children being lost on the beach
  o Cidavi: an integrating portal that offers valuable information for urban planning

BENEFITS

• Guarantee the water supply to the population, which implies optimize water management in scenarios of continuous water stress and variability of the water demand
• Protect the welfare of the inhabitants and visitors of the city
• Actively contribute to the city being a common projects of its inhabitants