SUEZ solutions for sustainable tourism shaping resourceful cities through smart data management





our fields of activity



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

at a glance

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

employees

over

90,000

operating on

5 continents

industrial and business customers

OVER
450,000

turnover in 2016*

€15.3 billion

drinking water produced (worldwide)*

5.3 billion cubic meters

drinking water distributed (worldwide)*

3,162 million cubic meters

waste water recycled (worldwide)*

882 million cubic meters

wastewater depolluted (worldwide)*

92%

people benefiting from waste collection services*

34 million people

waste treated*

41 million tonnes

hazardous waste treated*

2.9 million tonnes

recovered material from sorting centers*

10.4 million tonnes

open innovation

an international network of partners

Long-term privileged relationships with numerous highlevel 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).



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

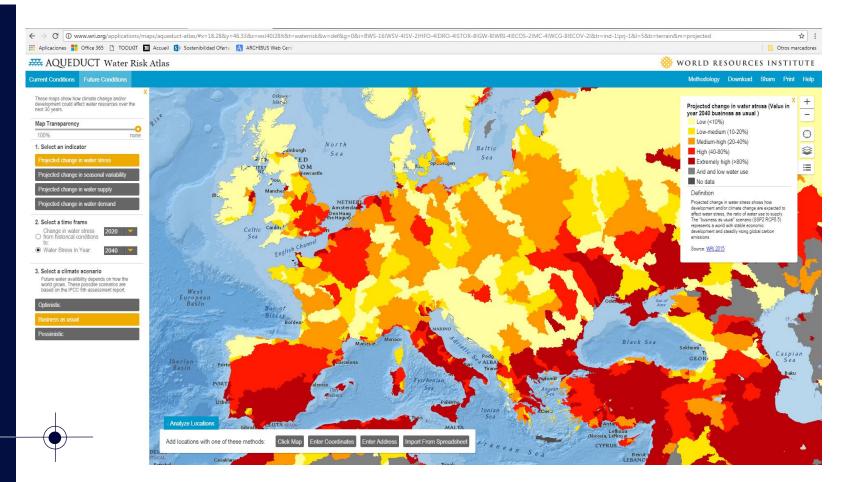
As an international player in the field of environmental services, SUEZ is present in various touristic cities in the world, notably in Spain. Apart from optimizing the management of environmental resources to increase urban attractiveness, the Group develops products and services dedicated to improving the experience of travelers in the cities.



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





Smart metering



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





Aquadvanced

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



RESCCUE FAMILY

























Suez









Resccue Project

SOLUTION

- 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.

BENEFITS

- 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.





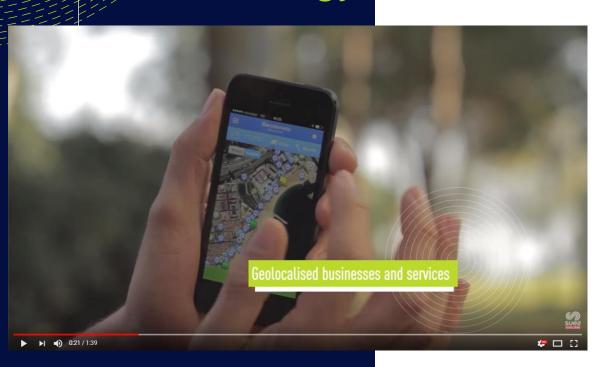
At SUEZ, we mobilize the resources offered by the digital revolution to provide new water-focused solutions in the field of smart tourism.

digital innovation at the service of smart tourism



Coastal water management : iBeach

focus on technology



CHALLENGES

- Preserving the quality of bating 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:
 - Smart Water: development of solutions to enable real-time response to the variation of water demand;
 - Smart Environment: guarantee of the continuity and quality of water supply to both citizen and the tourist;
 - 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:
 - Water Track: a tool that allows citizens to monitor their water consumption
 - 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
 - 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





