ON'connect™

Digital Services for the environmental transition
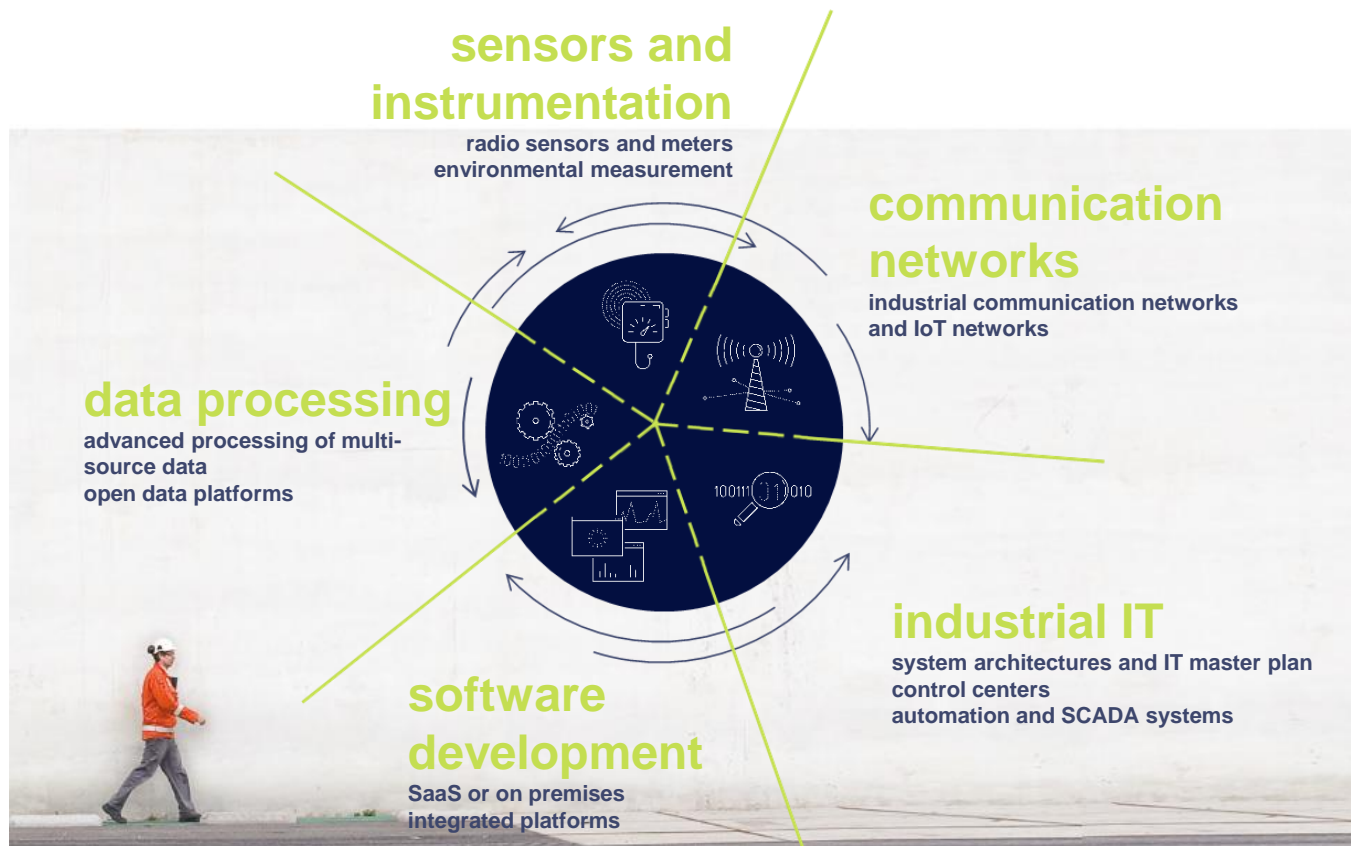
key expertises

we manage the complete value chain, from connected devices to digital solutions design, communication networks and mass data processing.

sensors and instrumentation
radio sensors and meters
environmental measurement

communication networks
industrial communication networks and IoT networks

data processing
advanced processing of multi-source data
open data platforms

industrial IT
system architectures and IT master plan
control centers
automation and SCADA systems

software development
SaaS or on premises
integrated platforms

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SUEZ Smart Solutions
Key figures

2009
year of creation of SUEZ Smart Solutions, a wholly-owned subsidiary of the Suez Group

300
engineers and experts in the fields of **environment, real-time information systems and data processing**

150M€
turnover worldwide in 2019

24
countries benefiting from our services

€10M
annual investments for R&D and innovation

1,000
real-time platforms deployed for smart water management

4,5M
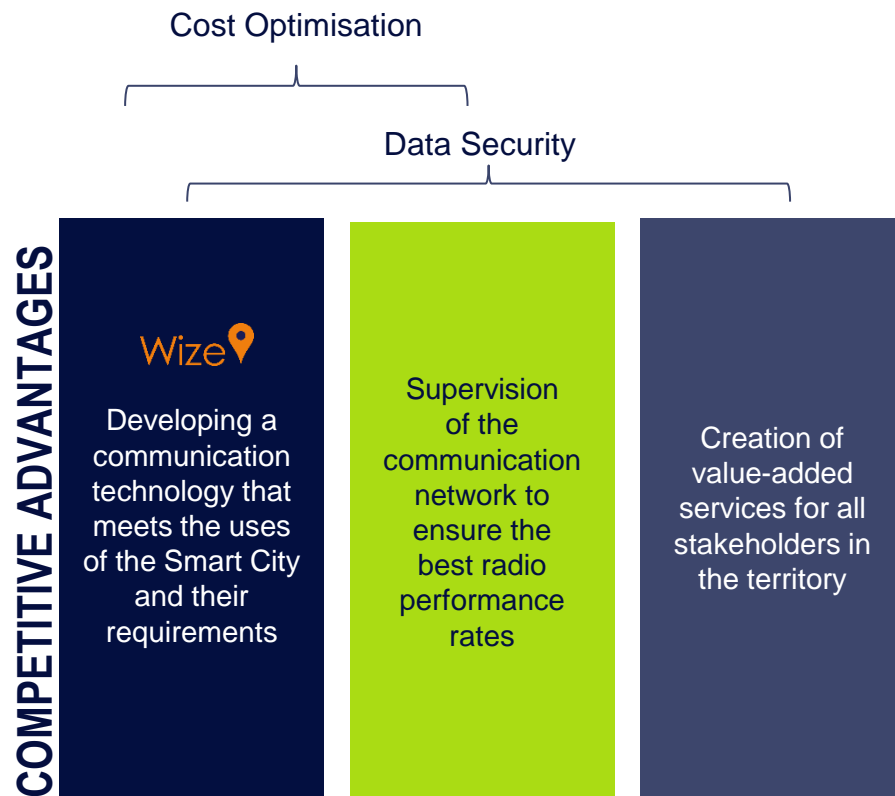smart meters and sensors operated for utilities and cities

UNITED KINGDOM — 7 000 meters

CZECH REPUBLIC — 50 000 meters

FRANCE — 2.5 M meters

ITALY

SPAIN — 1.6 M meters

PORTUGAL — 57 000 meters

MALTA — 250 000 meters

MOROCCO

ALGERIA

PILOTS

The ON' connect™ range

The ON'connect™ range

Digital services resulting from the processing of data sent by connected objects

Cost Optimisation

Data Security

COMPETITIVE ADVANTAGES

Wize

Developing a communication technology that meets the uses of the Smart City and their requirements

Supervision of the communication network to ensure the best radio performance rates

Creation of value-added services for all stakeholders in the territory

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The choice of the communication technology

Wize 📍

LPWA 169Mhz technology to meet the requirements of Smart Metering proven and improved for **15 years:**

SUEZ — water services corporation — GRDF — eau de Paris — REGAZ bordeaux porteur d'énergie

2005   2010   2012   2017   2019

Radio performance >90 %
Long-range radio frequency
Specific to indoor & deep-indoor

Optimized TCO
Minimized Infrastructure (without repeater)

Sustainability & Reliability
7 million connected objects of which **4.5** operated by SUEZ
Guaranteed until 2042

National coverage of the French territory
available on the entire country from 2022

International development
Licence free in Europe
CEN European Standard

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Monitoring the radio performance

From our Smart Operation Centers, SUEZ operators monitor Wize communication networks:

- **Monitor daily** the proper functioning of transmitters, concentrators, storage servers, the telecom transmission chain, etc.
- **Ensure remote operations** on the transmitters and concentrators (software updates, configuration, etc.).
- **Guarantee** to their customers the availability of reliable and high-performance data, 24 hours a day.
- **Assist operators** in the use and analysis of remote reading or monitoring solutions for the water network (leak detection, abnormal consumption, etc.).
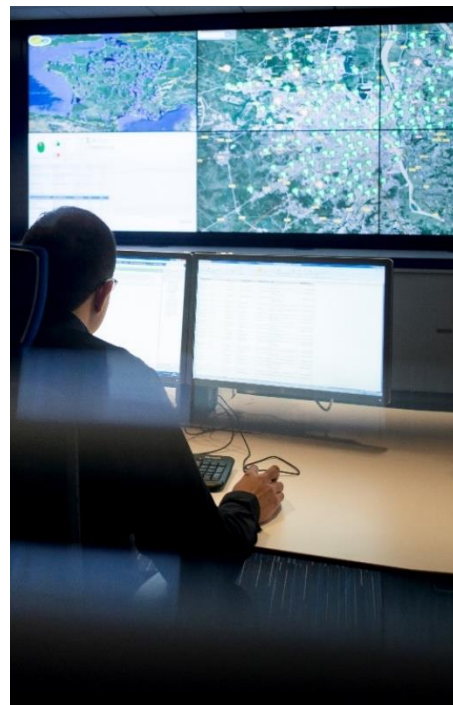
Wize

2
Control center
(Barcelona, Paris)

4.5 million
Connected meters

+ 4 000
Supervised concentrators

300 million
Data processed per day

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ON'connect™ range
SUEZ becomes an IoT player
with expertise in the entire data chain

From the connected object to the digital tools

OBJECTS

IoT NETWORKS

DATA PROCESSING

APPLICATIONS & SERVICES

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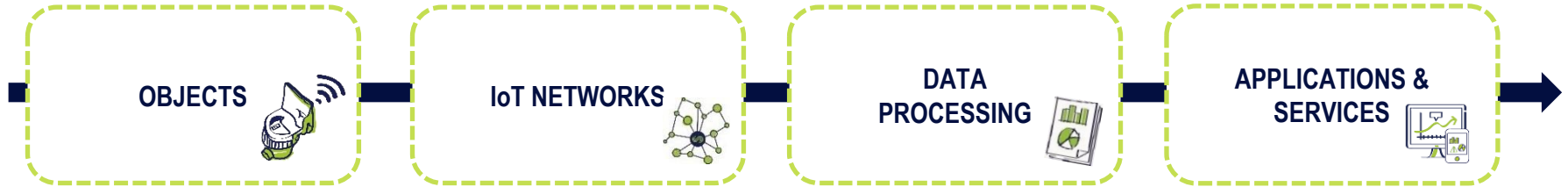
ON'connect™ metering
from manual reading to communicating meters

Manual reading	Mobile reading devices	Smart Meters

1 to 2 readings per year
A meter reader is required
billing based on estimates

Punctual reading (~ 4 times a year)
A vehicle is required / no disturbance
billing based on estimates

"Remote reading"
Remote multi-daily reading,
automatic, sending frequency
configurable from 1 to 8 times a day

-
- Invoicing not transparent
- No asset management
- Required travel
- Tedious leak detection

-
- Data loss
- Required travel
- Permanent emission
- No asset management
- Tedious leak detection
- No associated services

ON'connect™ metering

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ON'connect™ range

The remote reading that does more than billing!

Remote reading of metering data

ON'connect™
metering

Eco-consumption service for households and businesses

ON'connect™
coach

Remote control of a facility's water supply

ON'connect™
switch

Optimizing the environmental performance of buildings

ON'connect™
fluids

Prevention service for the senior citizens' loss of autonomy

ON'connect™
generation

Real-time monitoring of tourist arrivals

ON'connect™
tourism

Intelligent watering of parks and green spaces

ON'connect™
spring

Wize network provider offer by SUEZ

ON'connect™
infra

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Details of the solutions ON' connect™

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ON'connect™ to
automate metering & improve service management

ON'**connect**™
metering

- **Automation of data collection from meters (water, electricity, energy)**

- **Daily monitoring of consumption and alerts**
(breakages, consumption peaks, metering anomalies, etc.).

- **Billing on the basis of the effective consumption**

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Success Story **ON'connect** metering

Renewal of the entire AMI solution for the city of Paris for 94 000 connected static water meters

Eau de Paris

- In 2005, a pioneer in AMI, Eau de Paris deployed a first generation of smart water meters. The entire left bank was already using 169 MHz radio technology

- In 2017, the public utility chose SUEZ Smart Solutions and ON'connect™ metering to renew its solution of communicating meters with 169Mhz Wize technology.

94 000
smart meters

- -

2 millions
connected households

- -

5 and a half years
term of the contract

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Success Story **ON'connect**™
metering

99 % ,
a record-breaking data
collection rate to
improve the customer
relationships

Water Authority of Mont de Marsan, France

o   With a network efficiency of more than 90%, the Régie
    municipale, which serves 40,000 residents with
    drinking water, is exemplary in terms of the
    performance of its distribution network.
o   In order to continue to modernise its service, the local
    authority wanted to improve its customer relations:
    billing based on actual consumption, leak detection
    after metering, daily monitoring on the Internet, etc.
    The company also wanted to improve the quality of its
    service.
o   Close collaboration between SUEZ Smart Solutions
    and the local authority has now made it possible to
    achieve a rate of uptake of around 99%.

24 000
compteurs connectés

277 kilomètres
De canalisations

40 000
Habitants

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Success Story **ON'connect** metering

Design and integration of the connectivity service for 11 million smart gas meters in France

GRDF

- GRDF is the public French national gas supplier of the country

- In 2012, the utility chose 169Mhz Wize technology for its national project of smart gas meters called "Gazpar"

- SUEZ Smart Solutions designs the communication chain: supplier selection, product design (meters, concentrators), definition of the communication protocol, tests.

- In 2017, GRDF is one of the founding member of the Wize Alliance

11 millions
of smart gas meters in 2023 (4M already deployed)

- -

2042
Durability of the technology ensured

- -

SUEZ

Barcelona water utility deploying 169Mhz-Wize AMI solution for 1.5 million meters

⦿ Aïgues de Barcelona

○ The public-private utility Aigües de Barcelona specialises in the management of the entire water cycle.

○ It provides water supply to nearly 3 million people, offering the 23 municipalities in the Barcelona metropolitan region a customer oriented service, focusing on excellence in service delivery and commitment to innovation

○ From 2015 onwards, the utility has decided to gradually deploy AMI for its **1.5M water meters** fleet

500 000
smart meters already deployed
- -

3 millions
connected households
- -

SUEZ

Malta island facing significant challenges of water resource and demand management

📍 Malta – Water Services Corporation

- In 2010, facing water resource scarcity and demand management the Water Services Corporation, Malta's' public utility for water management chose ON'connect™ metering

- Objectives of better conserving and accurately managing the island nation's limited water resources, offering new services to customers while encouraging a responsible behavior towards water consumption.

430 000
inhabitants

+ 1.8 millions
of tourists per year

- -

250 000
smart water meters

- -

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ON'connect™ to
save on your water and energy bills and reduce your carbon footprint

ON'connect™ coach

- **Customized water consumption reports**

- **Leak and overconsumption alerts**

- **Practical tips for saving water and energy**

* ON'connect™ coach adapts to professionals in the region.

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Adding more value to the water service
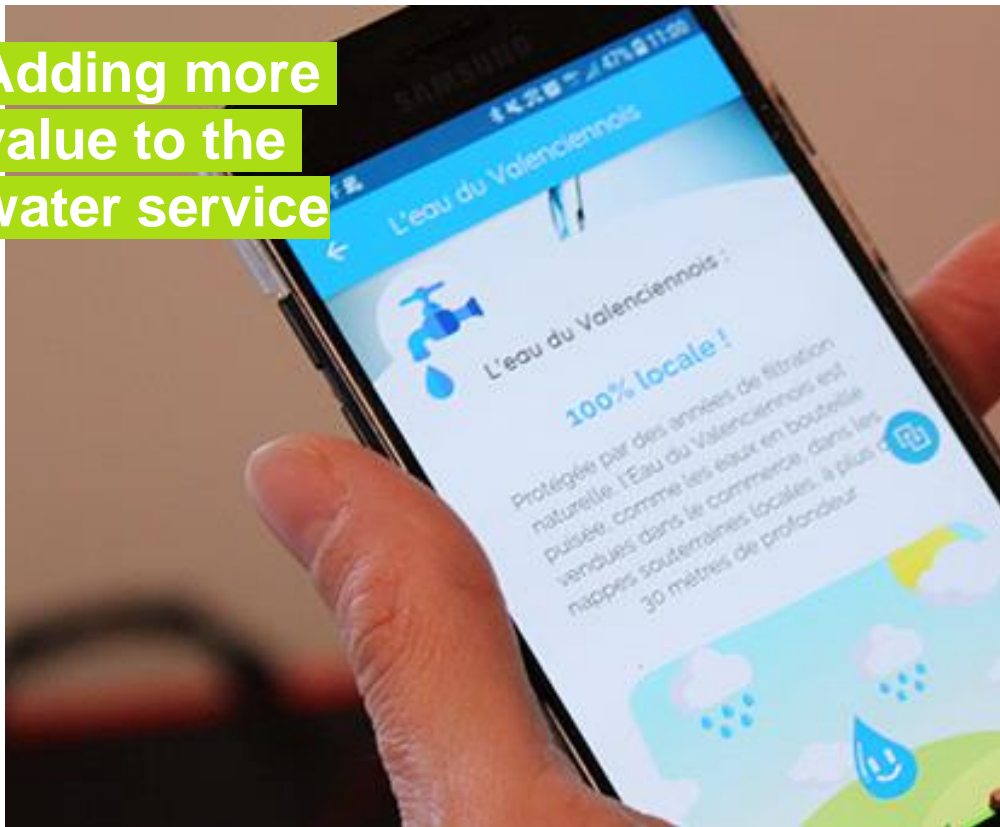
Valenciennes – Eau du Valenciennois

- Equipped since March 2019 with smart meters, the public water syndicate wants to increase transparency to its users.

- An application called Coach Cons'eau has been developed to share information on the quality of the distributed water.

- Making water saving "a collective challenge", ON'connect™ coach's reports and personalized advices are integrated into the mobile application.

25
municipalities
- -

2 million
equipped households
- -

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ON'connect™ to
Monitor the water supply remotely

ON'connect switch
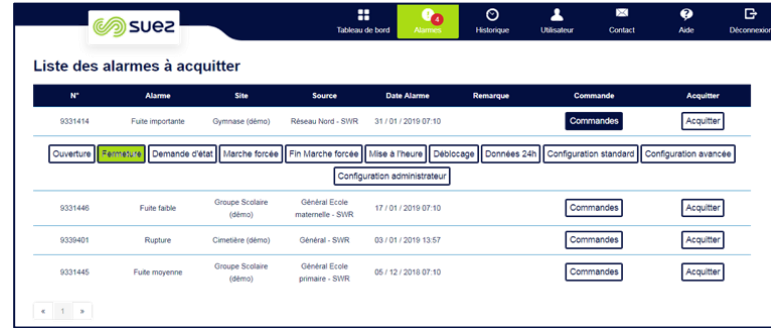
- **Consumption monitoring** by site

- **Programming the opening and closing** of valves

- **Leak alarms and automatic shutdown** of the water supply

ON'connect switch

Switch off the water supply as soon as a leak is detected to ensure the safety of the installations

Facilities (train stations, schools, etc.)

- o Installations carried out at 10 stations, 1 camp and 10 high schools

- o Pay back in less than a year thanks to the detection and repair of water leaks

ROI in less than a year
On all 21 sites

- -

148 leaks detected
Of which 18 major leaks

- -

30 %
Saving on water invoices

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ON'connect™ to
improve the environmental performance of buildings

ON'connect™ fluids

- Centralization of **water, gas and electricity** consumption data

- Customizable and configurable dashboards and data analysis indicators

- Alerts at different levels to prioritize actions

+ Integration of other additional data
+ Installation of connected devices

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Success Story **ON'connect** fluids
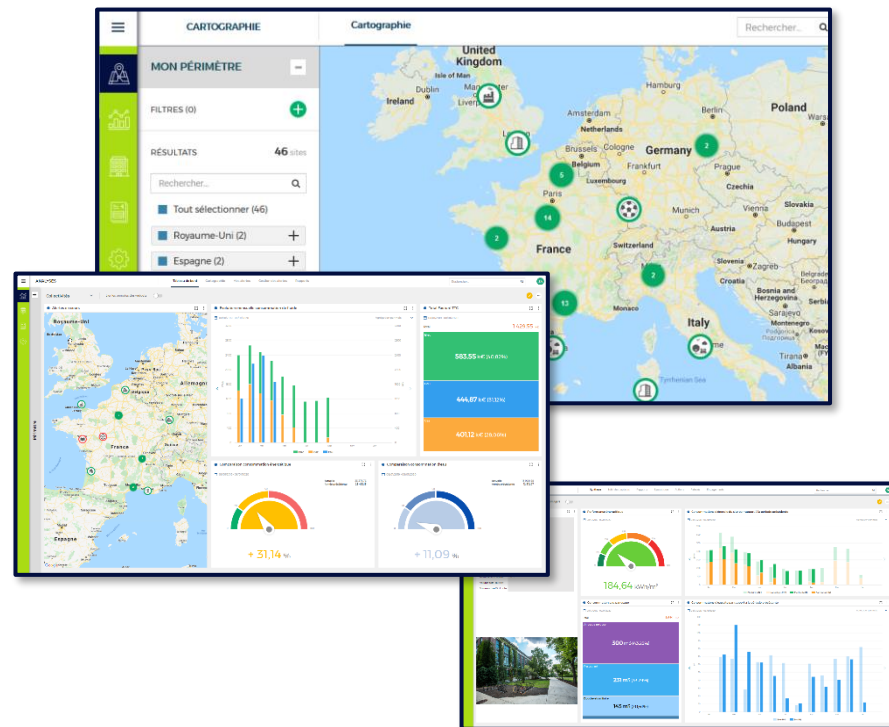
Monitoring water consumption on the 471 km of the motorway network

ESCOTA (Vinci)

- VINCI Autoroutes management, like many companies, must improve their environmental performance (reduction of water and energy consumption, reduction of CO2 emissions, selective sorting and recycling of waste, etc.).

- In order to meet its environmental commitments, ESCOTA, a Vinci Group company, has chosen ON'connect™ pro to manage its consumption on its entire road network.

200 sites
equipped with communicating objects
- -

150.000 €
Savings target to be achieved
on the annual water bill
- -

44 users
on a 100% Saas secure platform

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ON'connect™ to
optimize the watering of your green spaces

ON'**connect**™
spring

- **Monitoring of daily and monthly water consumption per watering station**

- **Adapt automatic watering according to humidity and weather forecasts**

- **Detect water leaks and reduce watering consumption**

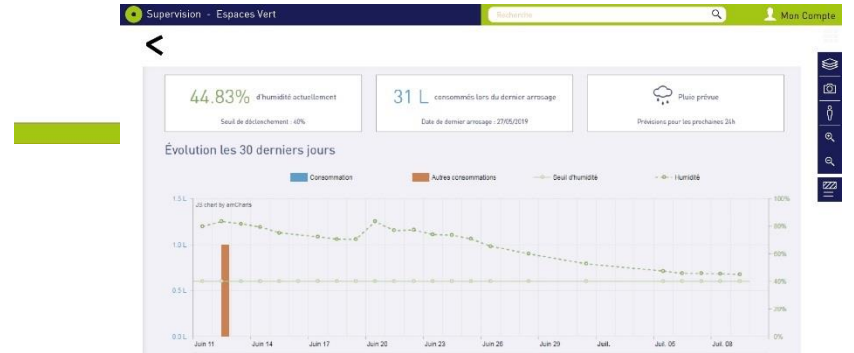- **Facilitating the work of local teams**

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Greening Angers, the most green city in France !

📍 **Angers Loire Métropole**

- Angers, with 100m2 of green space per inhabitant within the city walls. The preservation of this heritage is at the heart of the challenges of the Smart City project launched in 2019.

- System Won by the consortium led by ENGIE, SUEZ offers an anticipated, differentiated and centralised approach to public watering.

30%
Goal of reducing water consumption for irrigation purposes
- -

400
Connected objects to deploy
- -

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ON'connect™ to
Support the well-being of seniors
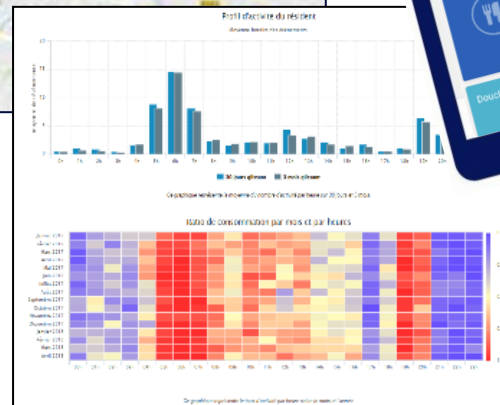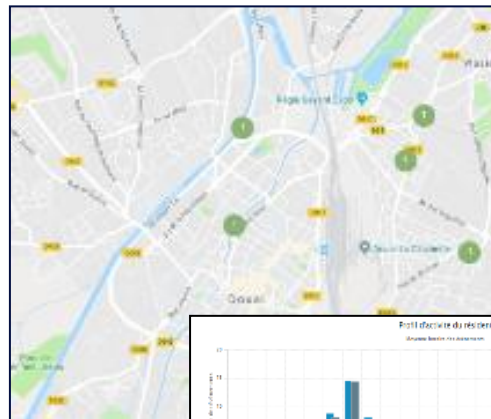
ON'connect™
generation

- **Preventive monitoring of daily consumption habits**

- **Alerts** (no consumption, repeated night consumption, etc.)

- **Mobile Apps** for family and friends

Success Story **ON'connect** generation

Objective data to strengthen support for residents

Nursing Home Saint-Jean d'Angély in Nice (French Riviera)

- To improve the support of its residents support, the community center of Nice chose ON'connect™ generation in 2017.

- The health care team has objective data that enables them to identify needs and therefore improve the services provided to residents.

22
Equipped Accomodation

- -

1 online plateform
Consumption monitoring

- -

Indicators related to the autonomy
Movement, transfers, night consumption, change in consumption habits

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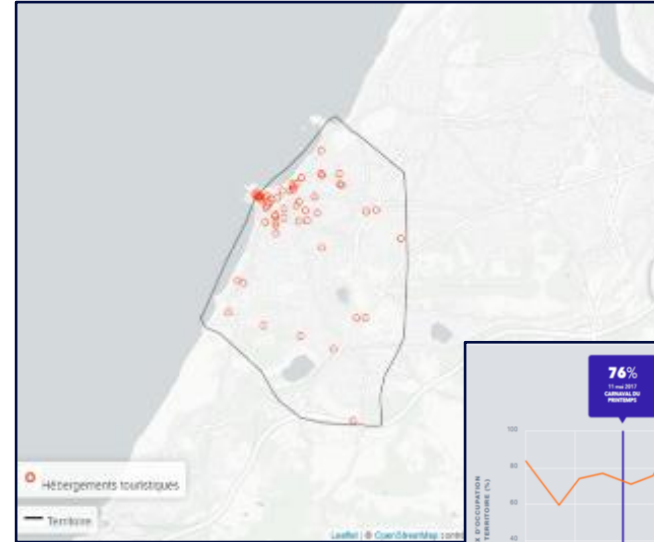
Manage tourist attractiveness

ON'connect™ tourism

- **Real-time monitoring** of the number of visitors

- **Estimate revenues** according to the periods of the year

- **Forecast** the level of vistor attendance

Forecast tourist flows and ensure the promotion of the territory

Biarritz – Tourism Office

o In 2017, the city of Biarritz deploys the ON'connect™ tourism offer to identify the factors that drive traffic to its territory (weather, tides, events, holidays, etc.).

o The tool differentiates between vacant and occupied accomodations through water consumption.

o Informed, the city knows its actual attendance and can estimate its associated revenues for a season.

21,000 smart meters

installed since 2014

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1 web platform

real-time management and anticipation

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ON'connect™ to
connecting its objects towards the smart city

ON'connect™ infra
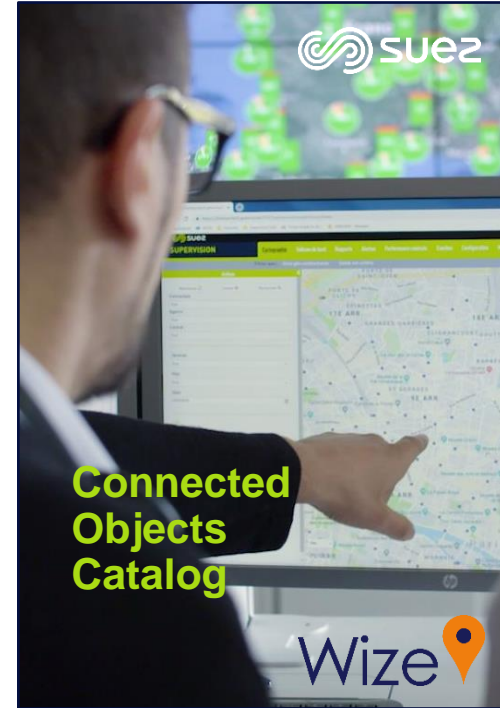
- **Having a dedicated and secure IoT network**

- **Have the IoT network supervised by a third party**

- **Receive raw data**

Connected Objects Catalog

Wize

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Success Story

ON'**connect**
infra

Connect all the gas meters in Bordeaux !

📍 **REGAZ, Bordeaux Métropole**

RÉGAZ
BORDEAUX

○ Following GRDF, REGAZ has decided to launch the generalisation of remote meter reading based on Wize technology from 2019.

○ SUEZ has been entrusted with the supply of equipment to build the connectivity network as well as the implementation of a bi-directional communication platform allowing interconnection with the Customer Information System.

○ Today, the metropolis has its Wize network, which it can use for other purposes

230,000
Communicating meters (deployment in progress over 7 years)

- -

100
Gateway deployment in progress over 2 ½ years)

- -

5 years
Application maintenance of the connectivity network and communication platform

🌀 suez

For further enquiries, you can email to puranut.w@suez.com