Smart solutions in water markets





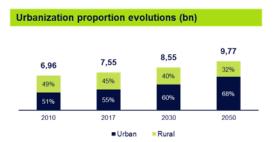
An emergency situation loudly voiced by most stakeholders

- Urbanization
- Growth of population
- Emerging economies driving needs in drinking and waste water
- Continued industrialization
- Needs in agriculture
- Environmental awareness



- Water shortages / hydro stress
- Radical disasters
- Care for new pollution





Technologies will play a key role and new strategies based on reuse or desalination become necessary



Needs of water in agriculture : market overview



~10bn





-17% Yield reduction due to climate change by 2050



-17% Farmland ha per capita by 2050



+60% Productivity increase required to feed the planet by 2050



+16% Protein intake per capita by 2024



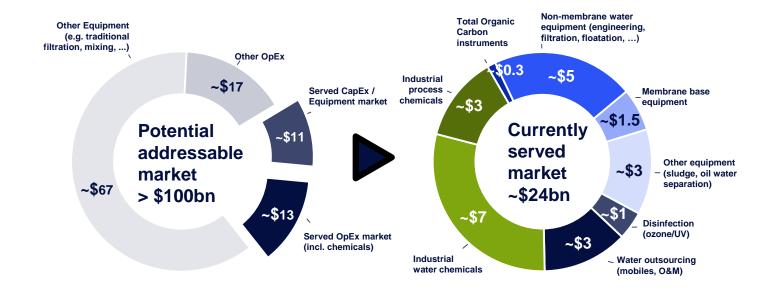
Environmental protection

The agricultural market will face and respond to major challenges in the long run



Industrial water market is booming...

A large addressable market leaving room for further penetration



A growth market with significant potential



Advanced Solutions: what for ?

Advanced solutions to support regulated & non-regulated business in municipal market

1. Performance based contracts → network efficiency

2. Maintenance programs → filters, meters, tanks

3. Digital based services → hypervision system

- Digital tools solutions for industrials allow to:
 - reduce operating risk
 - improve efficiency
 - Leverage existing know how

Advanced solutions transform O&M and services sector for the benefit of operators & clients



Portfolio of advanced solutions in municipal water market

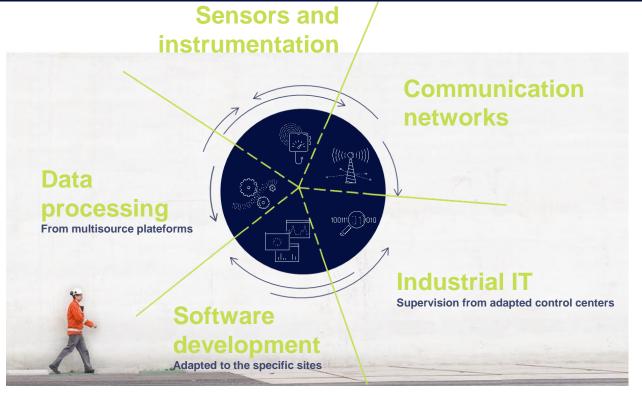


Optimizing the performance: a necessity



A large and fast moving market estimated at 18bn€

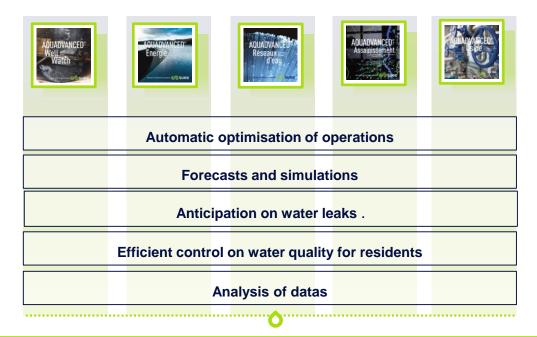
Objective: to master all the value chain: management of « big data », connected items, digital solutions, networks pressure and quality...



A crowded and technology driven market with innovative offers



First illustration: AQUADVANCED®...



An innovative modular tool optimizing performance indicators relating to drinking water networks (flow rate, pressure, quality)



...with positive achievements

Bordeaux

diminished by more than 75% water which was rejected in la Garonne and thus protects the quality of the river



AQUADVANCED® waste water

The region of Versailles

saves 200 000 m3 of water by better managing 1 000 km of network with a real time system helping to detect leaks and pollution



AQUADVANCED® network

Northumbrian Water

1 million d'euros of savings per year with savings in energy consumption



AQUADVANCED® Energie



Second illustration: ON'CONNECt[™] from sensors to services...



...with a positive social and environmental impact

Water Service Corporation de Malte

Manages 250 000 smart meters which help to manage the scarcity of water and to control the flows



ON'connect™ metering

Dunkerque

Propose services to its residents to limit the water consumtion and reduce their carbon footprint



ON'connect™ coach

Nice

Use smart meters to be able to keep seniors at home while checking in real time any issue on change in behaviour (consumption)



ON'connect™ generation



Next step: The smart and sustainable city of tomorrow



Dijon métropole, France

- an unprecedented smart city project based on remotely managing urban equipement of all the metropolis' 23 municipalities from a connected control centre.
- It processes around 630 daily calls received at the telephone portal dedicated to citizens'
- It manages the urban equipment of the metropolis 23 municipalities such as traffic lights, street lighting, CCTV or road services

1 Unique connected center

65 %

energy savings at the end of the contract

205

geolocated vehicules and 130 equipped with radios communication sets

+ 34 000

Renovation with 100% LED lighting units



Industrial water and digital platforms

optimization

collaboration

Increased customer

Faster proposal generation

Elevated on-site service

Streamlined fulfillment

engagement 24/7 digitized access Customized solutions eCommerce Workforce & supply chain **Asset performance** management Utilize data and advanced analytics Optimize performance of customer assets Automate data collection and reporting

Customer

Digital tools to enhance productivity and maximize value



Conclusion

- Future generations and roll out of new technologies will play a key role in addressing the water issues of our century
- Reconciliation of the industrial challenges and environmental protection will be at the heart of the equilibria world wide
- Various solutions and underlying business models will have to be available to tackle all needs
- Will to provide access to basic needs to everyone and development of green investments
- Change in water value perception; this resource is very much valuable and has a price

