



# Smart water solutions to solve your water challenges

# Today's Webinar

***With more people staying indoors, and the increased strain on our water systems:***

- *How do you future-proof and protect your building?*
- *How do you maintain an efficient and continuous supply of clean water at the right pressure?*
- *How do you maintain a consistent and comfortable indoor climate through heating and cooling?*
- *How do you deal with the demand of increased wastewater disposal?*
- *How do you ensure a trustworthy fire protection system?*

## Today's Speaker



**Paul Winnett**

*General Manager, Building Services  
Xylem Water Solutions UK*



**Karl Wolf**

*Market Manager, Building Services  
Xylem Europe*

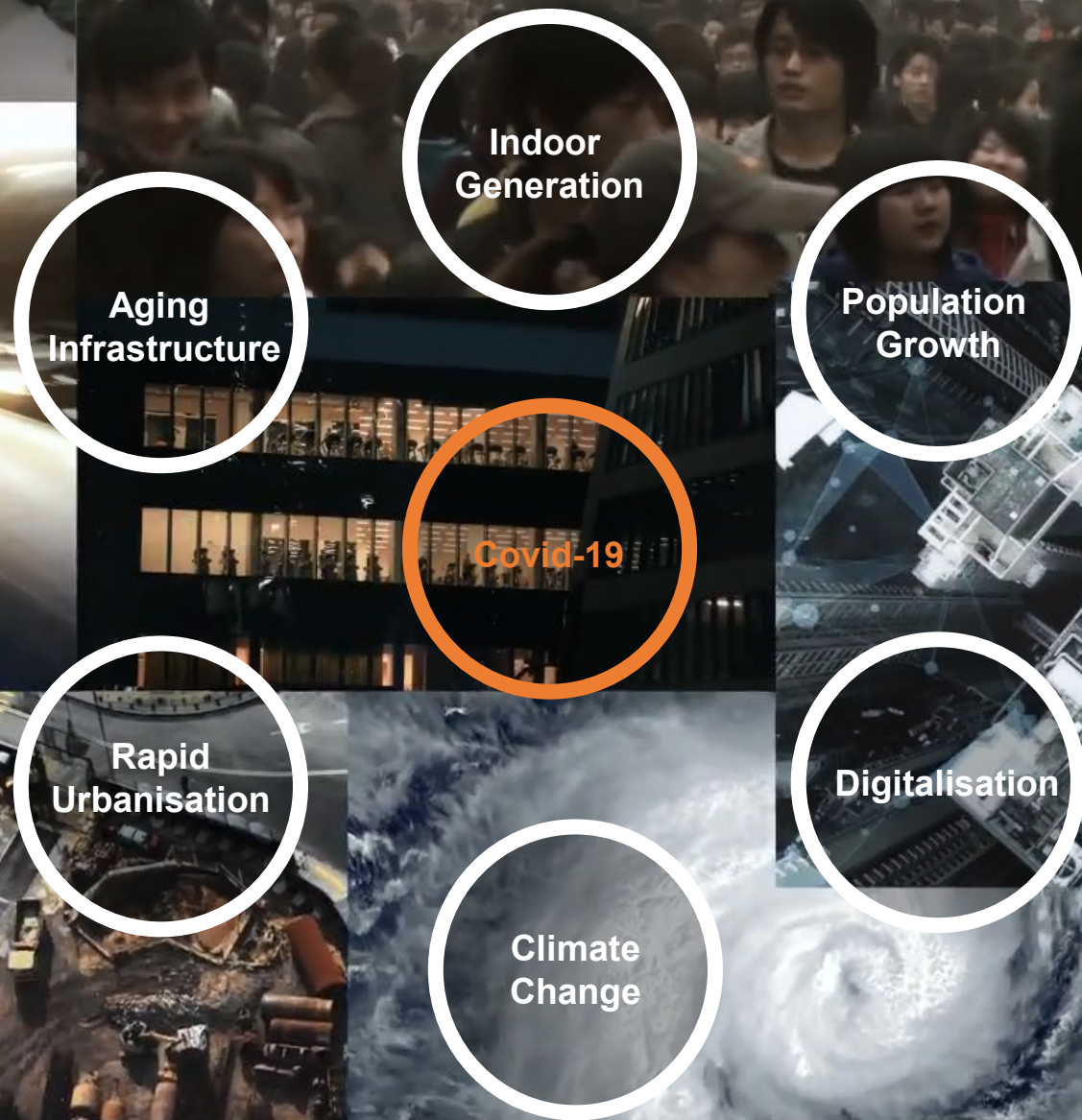


# How do you future-proof and protect your building?





# Future-proof?



# Your building?



**TENANT/GUEST/  
EMPLOYEE COMFORT**



**WATER & ENERGY  
FOOTPRINT**



**LABOUR  
EFFECTIVENESS**



**ASSET LIFE**

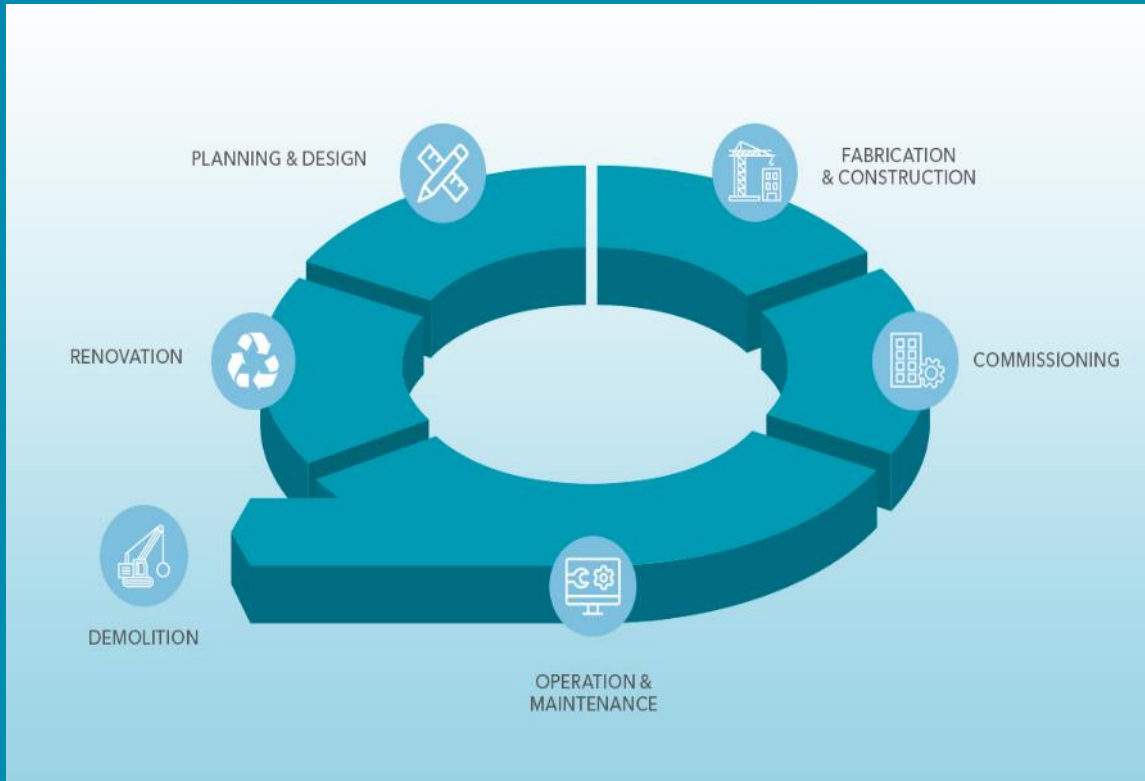


**RISK MANAGEMENT**



**OPEX & CAPEX  
CONTROL**

# Future-proof with services along the life-cycle



## Planning & Design

Tools:

Training:

Support:

BIM, Selection tool Xylect, Cad-Center

Xylem Learning Centers

Application Engineers

## Fabrication & Construction

*"A chain is only as strong as its weakest link"*

Highest quality products from Xylem production sites across Europe

## Commissioning

Tools:

Training:

Support:

IOM Instruction and How to Videos

Xylem Learning Centers

Xylem Services Fleet

## Operation & Maintenance

Operation:

Maintenance:

New Technology Services:

Lowest OPEX by high efficient products

Original spare parts, Xylem Services Fleet

Alarm Services, Smart Assets Monitoring,

HVAC Optimisation

## Renovation

35.9%\* of UK construction business is renovation

Xylem Building Service Solutions

\*89<sup>th</sup> Euroconstruct Conference Report, June 2019

# DIGITAL SOLUTIONS OPEN THE OPPORTUNITY FUNNEL

Intelligent  
Equipment

Smart  
Network &  
Services

Advanced  
Data  
Analytics



Function

**Sensing conditions** of  
equipment and its  
environment

**Central collection of  
data** from connected  
stations

**Transformation of data  
into information** for  
system environment

Value

**Local control** of  
equipment operation  
**Re-active** optimization

**Central control** of  
system operation  
**Pro-active** optimization

**Pre-emptive** optimization  
**Take decisions** based on  
system intelligence

ACCESSIBILITY



RESILIENCE



AFFORDABILITY

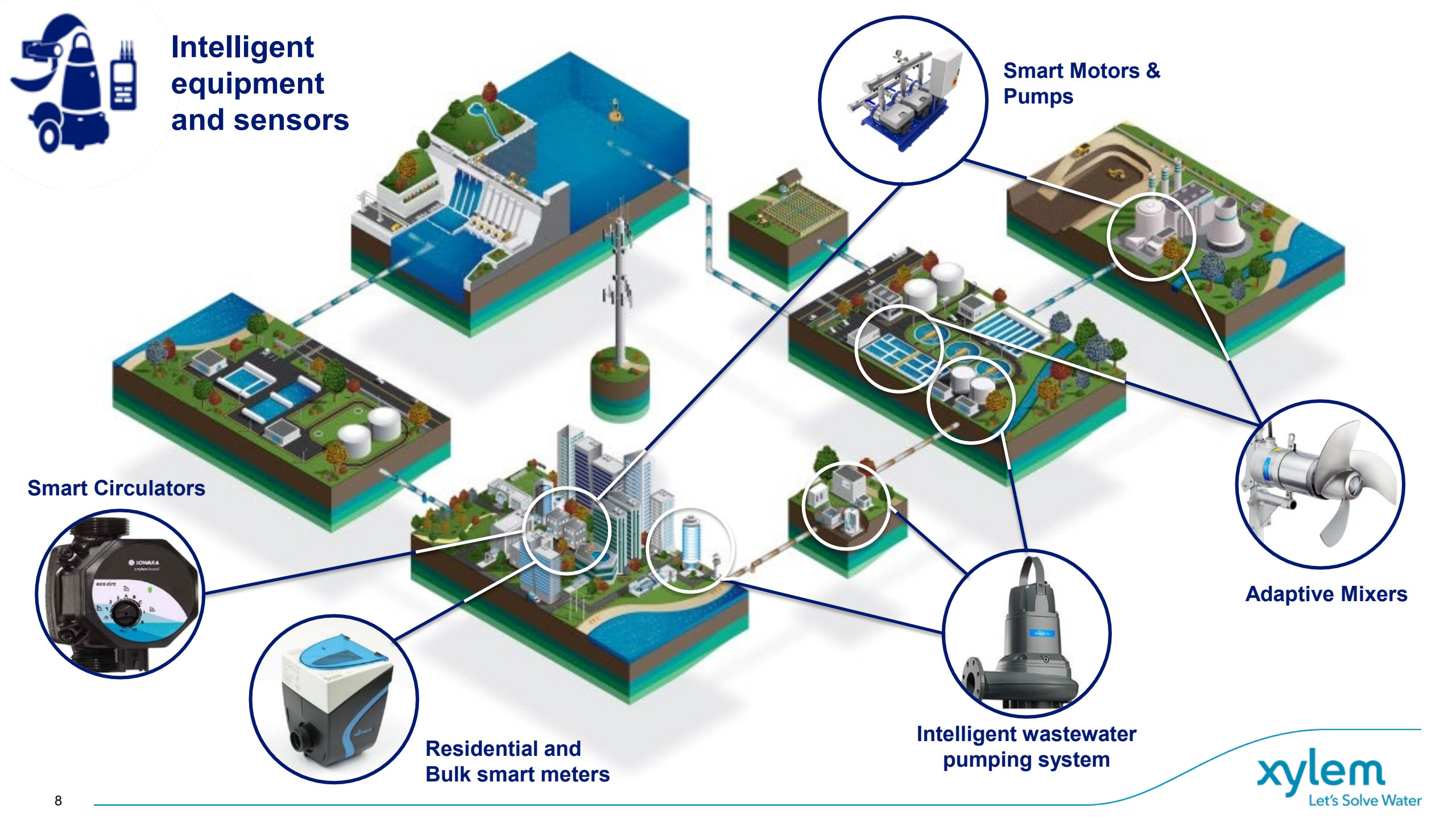


**xylem**  
Let's Solve Water

WATER SCARCITY

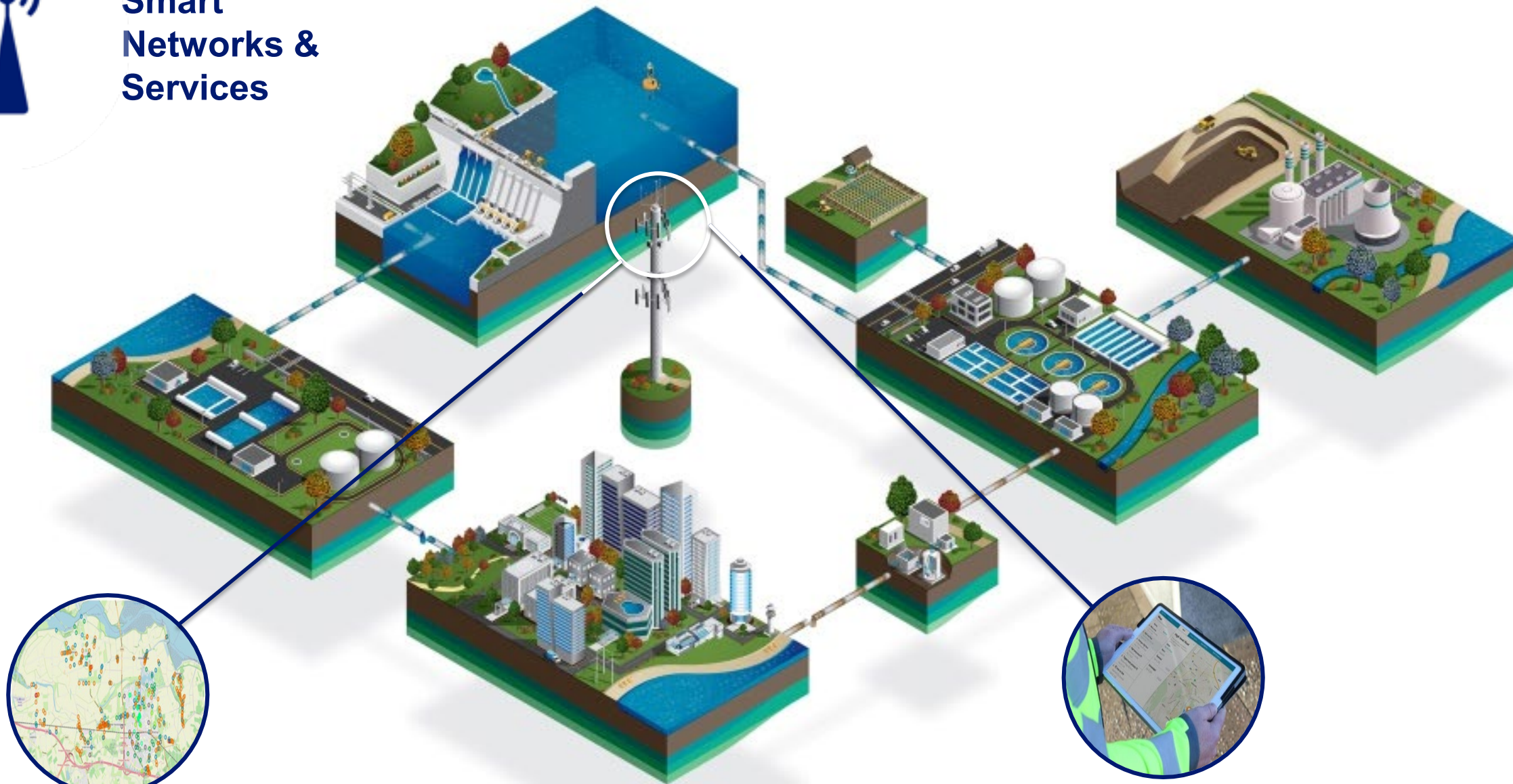
EXTREME WEATHER  
EVENT

AGING  
INFRASTRUCTURE





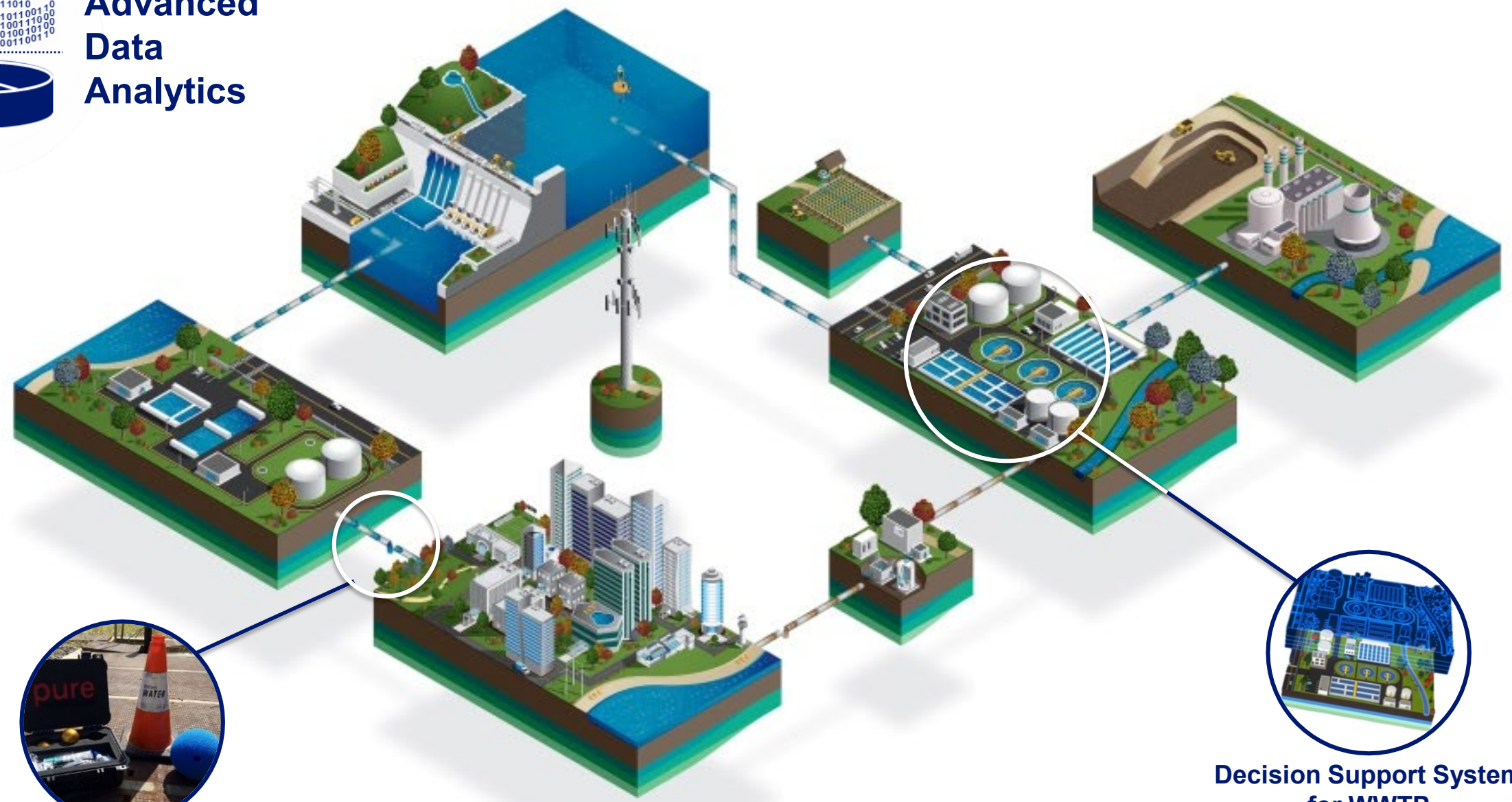
## Smart Networks & Services



**Asset Management and  
Service Optimization**

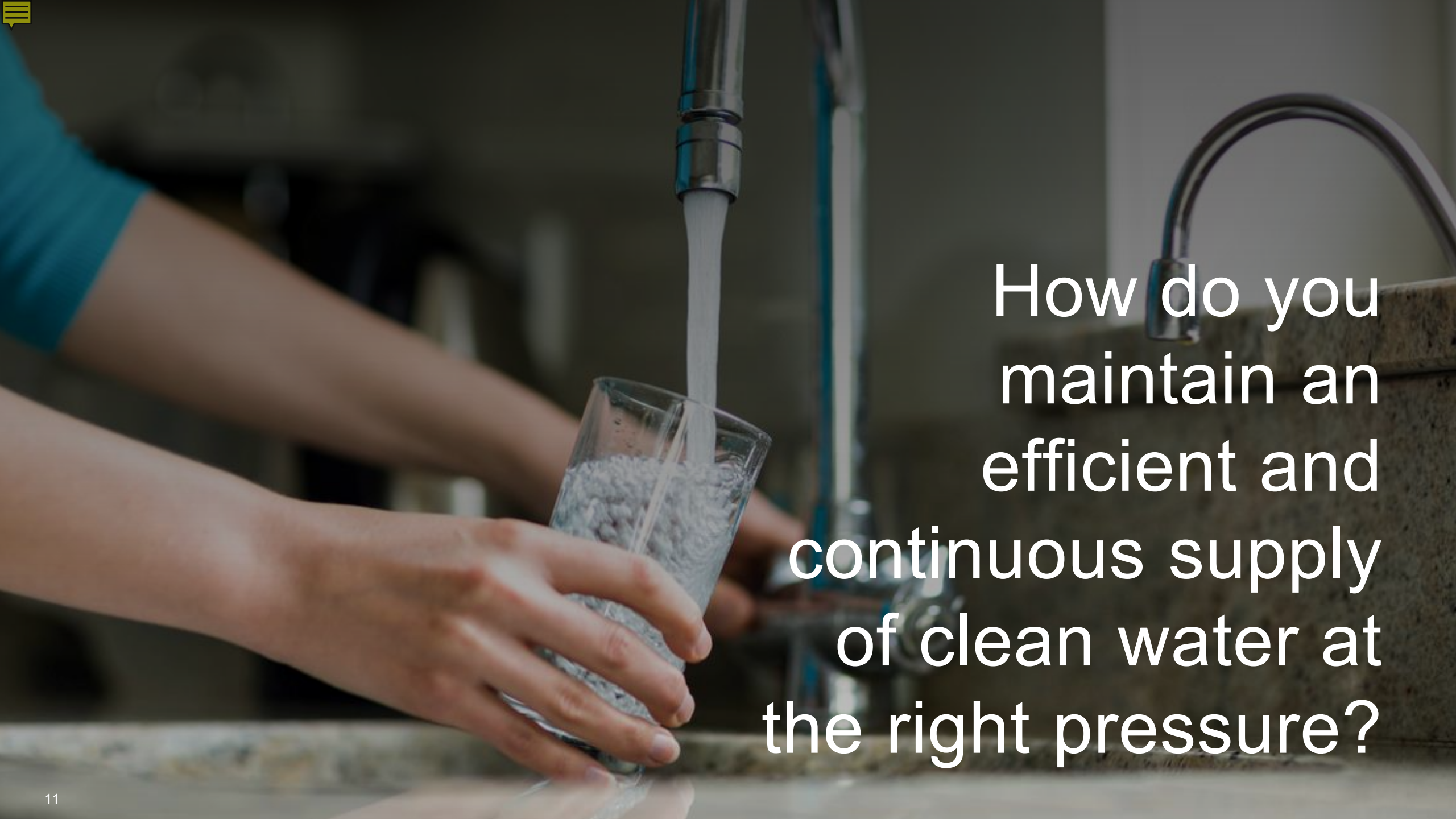
**Connectivity and Remote  
Monitoring**

# Advanced Data Analytics



Leak detection and condition assessment services

Decision Support System for WWTP

A photograph of a person's hands holding a clear glass under a running faucet. Water is being poured into the glass. The background is blurred, showing a kitchen sink area. The text is overlaid on the right side of the image.

How do you  
maintain an  
efficient and  
continuous supply  
of clean water at  
the right pressure?

# Water supply & pressure solutions



- **Residential and commercial booster systems** that help maintain a constant pressure for drinking water, bathrooms and restaurants with WRAS certification.
- **Efficient pumps** are designed to run at their peak efficiency for saving the building owner in operating cost while also maintain the demand of water at any time.
- **Flowmeters** to build intelligence into every point of your building.
- **Drives, monitoring and control** systems for optimised, reliable operation of all pumps.
- **Treatment systems** to raise drinking water disinfection to the highest standards of quality and safety.

# Burj Khalifa

Dubai, UAE

## Challenge

Water supply for the world's highest building, from the ground to the top.

## Solution

Xylem pumps were chosen to meet the extreme demand for reliability and efficiency. Xylem Lowara has supplied 6 water transfer sets and 7 water booster sets. The water booster sets, which are used to boost water pressure, are fitted with Hydrovar® variable speed drives

## Results

The Burj Khalifa officially opened on 4<sup>th</sup> January 2010, and the water system is supplying on average 946,000 liters of water per day at lowest energy costs.

How do you  
maintain a  
consistent and  
comfortable  
indoor climate  
through heating  
and cooling?

# HVAC Temperature Solutions



- **High-efficiency circulators** for residential and commercial heating, cooling and hot water applications.
- **Efficient pumps** are designed to run at their peak efficiency for heating or cooling the building ultimately saving the building owner in operating cost while also maintaining the demand of the HVAC system.
- **Treatment systems** to disinfect cooling water, keep HVAC systems free of bacteria, legionella and long term protection against microbiological growth.
- **Plate and frame heat exchangers** are designed to balance the run time of the chiller in commercial buildings to maximise energy economy.
- **Thermal energy meters** with various connectivity options and data management for continuous insights and control of the thermal network. (Remote reading for heat meter mandatory Oct 2020 in Europe).
- **Drives, monitoring and control systems** for optimised, reliable operation of all pumps.

# Hospitals

Lisbon and Angra do Heroísmo, Portugal

## Challenge

Meet the critical water and HVAC needs of a new hospital with energy efficient and sustainable solutions.

## Solution

Working closely with the project engineers, Xylem specified a combination of high efficiency Lowara pumps and drives, which can provide energy savings up to 70%. Flygt pumps, featuring a unique self-cleaning impeller technology for clog free operation and high efficiencies were also selected.

## Results

"We selected Xylem products for the hospital projects because of their high quality, broad range, durability and their energy efficiency. Environmental impact also played a role in the choice of Xylem" said Paulo Pires project manager of Sotécnica in Loures. Pires added that what was critical in the decision making process was that Xylem offered a total package solution for the fire protection, water & wastewater, irrigation, and HVAC systems.

A photograph of a city street at night during a rainstorm. In the foreground, several people are walking away from the camera on a wet, reflective surface, likely a bridge or promenade. They are holding umbrellas; one prominent red umbrella is in the lower left, and a dark one is in the center. The wet pavement reflects the ambient light. In the background, tall, modern skyscrapers with illuminated windows rise against the dark night sky. The overall mood is urban and atmospheric.

# How do you deal with the demand of increased wastewater disposal?



# Wastewater & Stormwater Solutions



- **Xylem's unique Concertor** bringing smart and interconnected solutions to the world of CBS wastewater pumping, reducing system cleaning costs up to 80% and energy costs up to 70%.
- **Residential and commercial wastewater and dewatering pumps** for efficient and reliable pumping of grey and black water.
- “Plug and Play” **residential and commercial Packed Pump Stations (PPS)** with Xylem waste water pumps inside, ready for installation and immediate connection.
- **Drives, monitoring and control** systems for connected, optimised, and reliable operation of waste and storm water systems 24/7.

# Wastewater Removal

Heathrow Airport Water Services, London, United Kingdom

## Challenge

How to deliver clog-free pumping of aircraft toilet wastewater containing a high level of non-biological solids including various plastic material, wipes, nappies and clothing causing chronic clogging issues and requiring frequent sump cleaning.

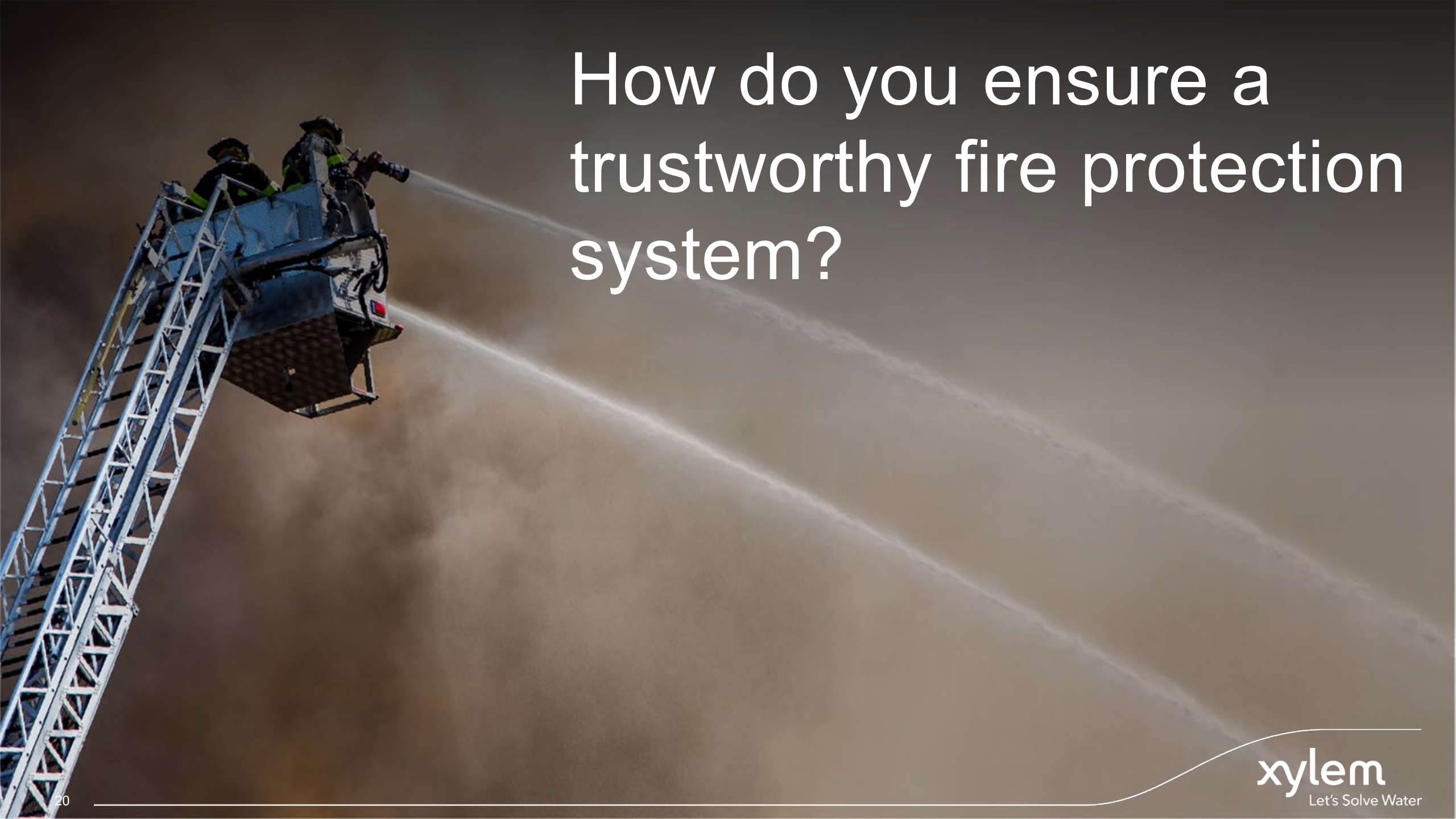
## Solution

Flygt Concertor™, the world's first wastewater pumping system with integrated intelligence. Concertor combines built-in sump and pipe cleaning functionalities in a single integrated solution; capable of tackling sump floating debris as well as pipe sedimentation. The integrated pump cleaning function together with Adaptive N-hydraulics effectively detects and solves clogging from large debris.

## Results

- Clog-free pumping with no emergency call outs
- Energy consumption reduced by 53 percent
- No extra investment in enlarged cabinets
- Possibility to reduce inventory
- Clean sumps and reduced cleaning and servicing costs.



A photograph of two firefighters in a bucket on an aerial ladder, spraying high-pressure water streams against a large fire. The scene is filled with thick smoke and the bright light of the water jets.

# How do you ensure a trustworthy fire protection system?

# Fire Protection Solutions



- **Firefighting booster sets** according to EN12845 in modular system with electro-pumps and motor-pumps to feed reliable pressure to the sprinkler systems.
- **Complete fire pumping skids** that help maintain a constant pressure for the sprinklers system all NFPA certified. Maintaining a safe environment for its occupants.
- **Multistage jockey pumps** are designed to provide safety while also maintaining operational efficiency should a single sprinkler trip. This prevents the entire fire suppression from operating for a single broken head.



# Water supply, pressure, fire protection and HVAC solutions for 4 star Hotel and Spa

Unhais da Serra, Portugal

## Challenge

Four star hotel H2otel Congress & Medical SPA is built at 2460 ft in a historical glacial valley known for its thermal properties. Therefore, water solution needs to be sensitive to the natural thermal water while enhancing the customer experience.

## Solution

### Water Supply & Pressure

High energy efficient Lowara endsuction pumps and boosters sets combined with Wedeco UV system for chemical-free water disinfection with a capacity up to 400 m<sup>3</sup>/h foer.

### Fire Protection

Reliable Lowara fire-fighting booster sets for the water pressure of sprinkler systems.

### HVAC

Hot water is delivered by stainless steel circulation pumps.





**Thank you  
for your attention**

**Tell us your need,  
we will support you**

Call your Xylem contact or simply go to:  
<https://info.xyleminc.com/UKI-Emergency-LP.html>  
available in all countries across Europe.

**Let us support you in overcoming your water challenges**