

altereo



French Engineering Grand Prize

KILWATER

XS PRESSURE: 2 BARS  
POTENTIAL: 20 KW



RISK: HIGH  
PRIORITY: 1



Artificial intelligence & expert engineering for

## HIGH-PERFORMANCE WATER UTILITIES®

We make your data talk to

### 1. Reduce the number of leaks

→ Which pipes (or connection) to replace for maximum efficiency

### 2. Reduce the duration of leaks

→ Where to look for them first

### 3. Reduce the flow of leakage

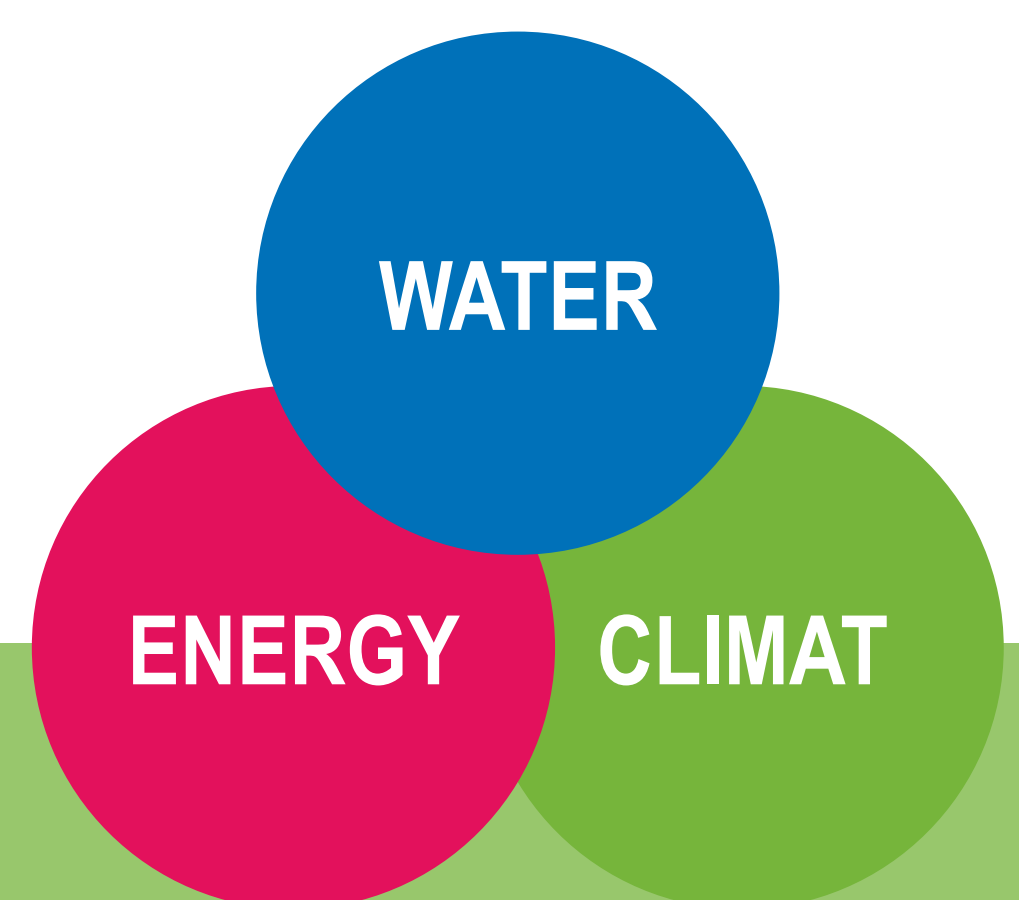
→ Where to reduce pressure while producing local electricity

*Performance, resource*

*Asset management, efficient replacement*

*Risk, resilience*

*Energy, carbon footprint*

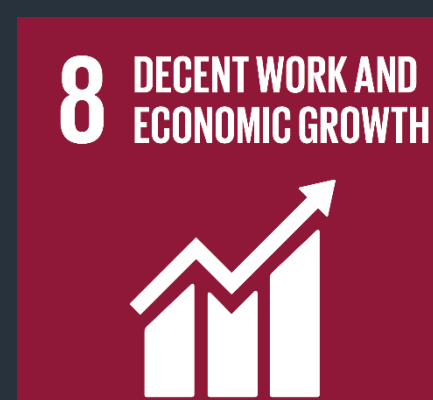


## Ecological AND energy transition

Reducing leakage also means wasting less energy and acting for the climate.

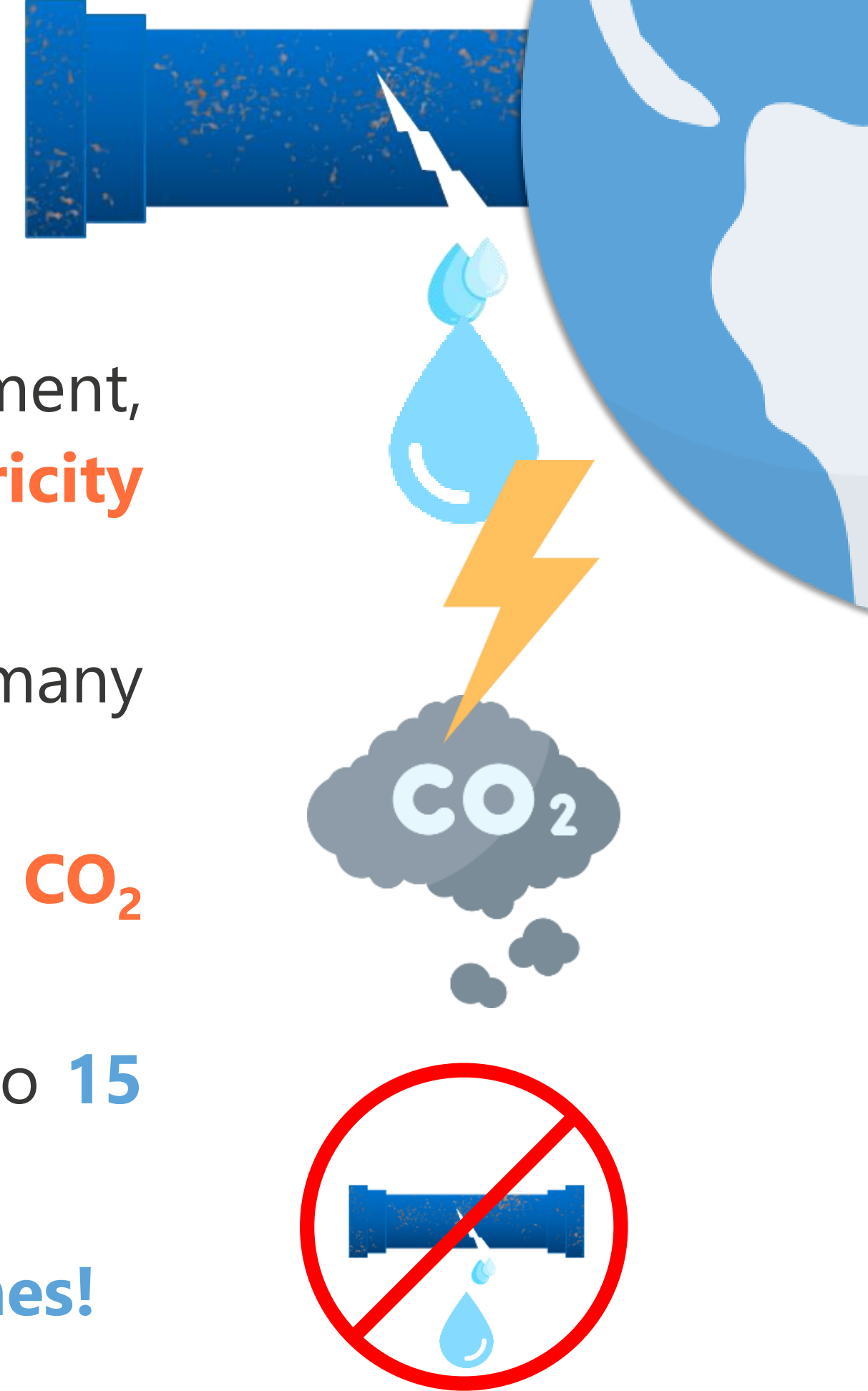


Solution addressing the  
UN Sustainable  
Development Goals





# Reducing leaks in drinking water networks also means wasting less energy and acting for the climate



The production of drinking water in the World requires, for pumping and treatment, **1%** of the electricity consumed on the planet. **This is as much as the electricity consumption of Australia or half that of France.**

Leakage accounts for **20%** of the water produced in France and over **50%** in many countries, which means that **100 TWh** of energy is wasted worldwide every year.

This unnecessary production of drinking water also emits **55 million tons of CO<sub>2</sub>** equivalent, or almost **0.15% of global emissions.**

**Reducing leakage by half** would avoid the production of electricity equivalent to **15 nuclear reactors** of 900 MW or the CO<sub>2</sub> emissions of **55 thermal power plants.**

**The first water resource in the World is the water that is already in the pipelines!**

## Our innovations at the service of our systems engineering

At Altereo, our engineering services are focused as much on eradicating leaks in drinking water networks as on optimising the electricity consumption of water utilities, using **3 levers**:



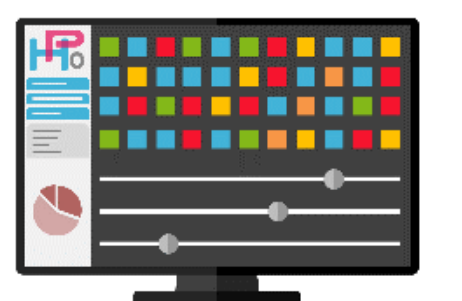
**reducing the duration of leaks** (where to look for them first)



**reducing the number of leaks** (which pipes and service connections to replace for maximum efficiency)



**reducing the flow of leakage** (by reducing the pressure)



Our R&D now provides us with:

- **HpO<sup>®</sup>**, our artificial intelligence which identifies the network components with the highest failure risks so as to implement **Responsible Asset Management**
- **Kilowater<sup>®</sup>**, our tool that simultaneously reduces the flow of leakage and identifies local electricity generation opportunities
- **KIS<sup>®</sup>** our GIS dedicated to water network management, including **HpO<sup>®</sup> Collect** which provides a daily link with field agents

We offer our customers the opportunity to benefit from our unique technologies and know-how to ensure the efficiency of their water distribution infrastructures and to succeed in their **ecological and energy transition.**

**Altereo has been a pioneer and leader in water infrastructure asset management for 33 years**

References of expertise missions for the efficiency of network asset management / provision of HpO<sup>®</sup> software services

Syndicat des Eaux  
d'Ile de France (75)

Chartres  
Métropole Eau (28)

Orléans  
Métropole (45)

Limoges Métropole  
(87)

Tours Métropole  
(37)

Le Havre Seine  
Métropole (76)

Grand Annecy (74)