






# TUBERS

## ROBOTICS

### AT THE SERVICE OF WATER

The TUBERS project aims to...

-  build an ecosystem of robotic tools, digital systems and innovative techniques for water resource optimisation
-  prevent or resolve leakages from ageing pipes or pipeline construction issues through constant high-accuracy water pipe inspections and repairs
-  become an innovative and scalable solution for the water distribution system in Europe to save leaking water, spent energy and lost revenue, hence advocating for a circular economy



Scalable and Modular robotic tools for pipeline inspection and repair



#### Resident Snake-like Robot

1. Modular design for extended functionality
2. Accurate water network navigation
3. Continuous pipeline scanning



#### Decision Support System (DSS)

1. Assistance with the decision-making process of inspection and maintenance scheduling
2. Structural defect identification
3. Data logging and archiving



#### Soft-robotic modular Robot

1. Accurate detection of leaks
2. Novel repair deployment mechanism for pipeline repairs



#### Base Station

1. Provision of resident robot charging
2. Wireless data exchange between resident robot and DSS
3. Retrieval and delivery of mission plans



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