

# SAFE HYDROGEN INJECTION MODELLING AND MANAGEMENT FOR EUROPEAN GAS NETWORK RESILIENCE

Higher integration and safer hydrogen injection management in multi-gas networks, by improving understanding of hydrogen projects, their risks, and opportunities.



## Mapping the European gas infrastructure

01

Mapping and assessing European gas T&D infrastructure in relation to materials, components, technology, and their readiness for hydrogen blends



## Development of new tools and methods

02

Defining methods, tools and technologies for multi-gas network management and quality tracking (simulation, prediction, safe management of network operation, realistic-scale test cases)



## Material Integrity of pipelines and components

03

Proposing best practice guidelines for handling the safety of hydrogen in the natural gas infrastructure and managing the risks. Investigating methods for inspection and leakage detection



## Flow assurance

04

Optimising the network design and general guidelines for operational strategies on hydrogen injection and flow transport in realistic networks.

