



# LeakVISION

## Project summary

**Industry Partner(s):**

Northern Gas Networks

**Innovator:**

Synovate

**Challenge:**

The current method of detecting the location of leaks within the gas networks is known as 'above ground bar holing'. This poses a challenge for the networks as the method can often produce inaccurate results, causing unnecessary excavation and reinstatement works to be carried out. The application of the technique is also physically demanding and can cause unwanted strains or injury to operatives performing the work.

**Approach:**

Northern Gas Networks & Synovate are undertaking a highly collaborative project, working with the EIC and a consortium of innovators, including TTP and University of Leeds, to develop 'LeakVision'.

**Outputs:**

LeakVision is a detection sensor that will internally detect, locate and quantify pipe damage / deterioration. The project will provide an improved understanding of the leakage process through advanced thermal modelling techniques.

**Looking Forward:**

Looking forward to developing smarter ways of working, LeakVision is just one of many future tools required to run and operate intelligent networks, understanding their risk profile, asset integrity and identifying pro-active investment.

LeakVision has the potential to help a traditionally reactive industry move itself in to a more cost effective planned investment process which adds benefits to the network licensees as well as its customers and members of the public.



**Impact:**  
**Transformational**



**Key benefit:**  
**Environmental**

Reduced need for excavation and reinstatement, and the potential to lower emissions if leak detection is improved and fixed quicker.

**Additional benefits:**



**Societal**

Reduced excavation means less street work and disruptions, and the minimisation of return call outs.



**Financial**

Reduced need for excavation to assess pipes in difficult to reach places.