

# Investing in the future of green gas.



**pti**  
**Net.**

Optimising the  
gas network



## What is OptiNet.

OptiNet is a UK-first, collaborative project to help us connect more sources of green gas to gas networks, supporting the transition to a Net Zero energy system.

## Why we are doing it.

Increasing the amount of green gas connected to local gas networks is a key component of the UK's plan to meet challenging climate change targets. It is the most cost-effective way to decarbonise heat, and avoids any major disruption to domestic and industrial energy consumers.

But some parts of the gas network have already reached a critical mass of green gas connections, with supply outstripping demand. Without a solution to manage the injection of green gases in a smarter way, local gas networks could be forced to decline connections in some areas.

The £2.4m project will result in tested, proven solutions to connect more green gas to local gas networks

And while more green gas is being injected, more flexible power stations are connecting too, creating unprecedented demands on local gas networks.

To meet this dual challenge, we need to optimise the capacity of the gas network, and this project will help work out how and where investment is needed to support green gas injection and electricity generation.

## What we doing.

A collaboration led by Wales & West Utilities, with Cadent, PassivSystems and Costain, Optinet will look at proving new applications of existing technology, investigating how compressors could maximise the amount of green gas in local gas networks.

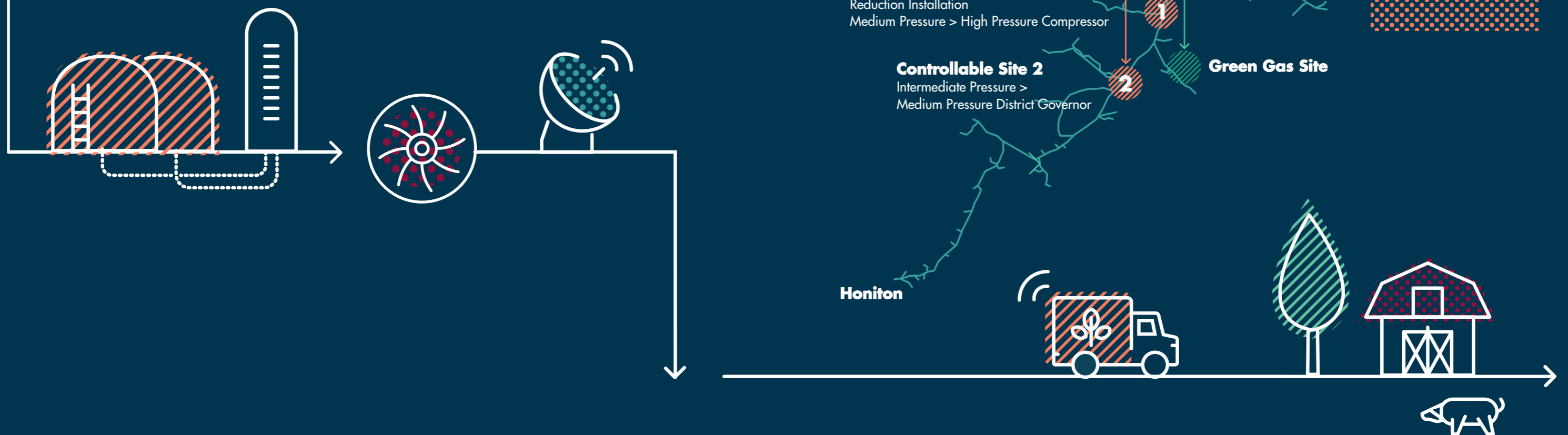
The medium pressure network that supplies the towns of Swindon and Honiton in south west England – itself almost at a critical mass of green gas enquiries in the area – has been selected as the demonstration network for the project.

## Phase 1

Smarter pressure control to maximise existing capacity in medium pressure network whilst maintaining security of supply.

## Phase 2

Compression into higher-pressure tiers to create additional capacity in the medium pressure network.





## Key benefits.

- Deliver a set of detailed recommendations on how to meet the challenge of connecting more sources of green gas to local gas networks.
- Give a detailed understanding of potential capacity solutions: from compression to storage and network reinforcement. This will provide investment decision support that can be applied by gas networks across the UK.
- Provide the evidence and data needed to justify investment in increasing supplies of green gas that meets future energy needs.

## Next steps.

Major project milestones in 2019–20 include:

- Design and construction of compressor
- Site preparation and compressor installation
- Monitoring and optimisation of the compressor in operation

The project will close with post-trial analysis and sharing of what we have learned.

