

# Wales & West Utilities future network planning - overview

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Wales & West Utilities



# Wales & West Utilities



We are the Gas DSO & Designer for Wales & south west England

We supply c.2,000 micro generation sites (CHPs)

We have 37 power stations connected with 1.76 GW total capacity

We have 1.7 TWh green gas connected to our network (19 AD sites)

We flexibly deploy 58 GWh of storage each day (UK 210 TWh seasonally)

We're investing in our future low cost and green gas/H<sub>2</sub>-ready network

Our network is resilient to severe weather and climate change projections

On a cold winter day over 80% of heat & power is transported in the gas network.  
The energy system is becoming more integrated and our role is changing.

# Understanding the challenges

## Secure

Reliable supply  
and infrastructure that  
meet demand



## Sustainable

Decarbonised and  
carbon neutral



## Affordable

Cost-effective across the  
whole UK population



# Decarbonisation Pathways - BEIS

A number of technologies hold potential, but there is no consensus on which approach will work best at the scale needed – for consumers and for minimising whole system costs.

## Electrification

- conversion to electric heat pumps or other electric technologies
- particularly useful for buildings not on the gas grid



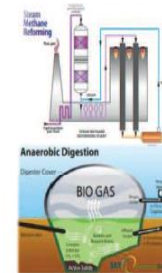
## District heat networks

- cost effective where there is sufficient density of heat demand
- likely to be an important part of the mix in the long term



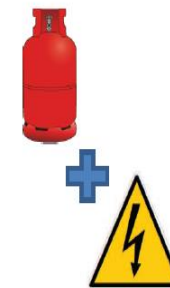
## Decarbonising the gas grid

- using hydrogen or biogas
- more work is needed to assess cost and feasibility



## Hybrid solutions

- two different heating technologies and energy sources working together



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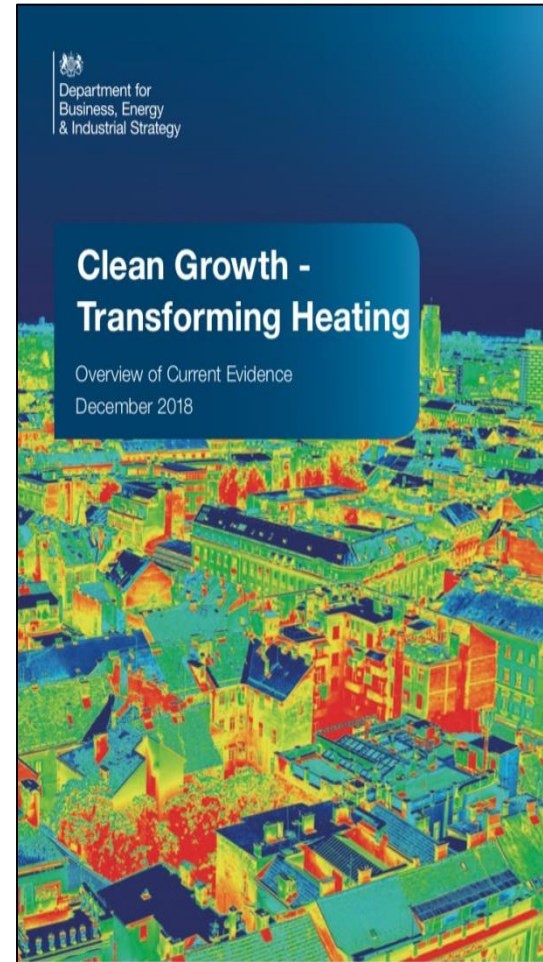
  
Department for  
Business, Energy  
& Industrial Strategy

# Future pathways

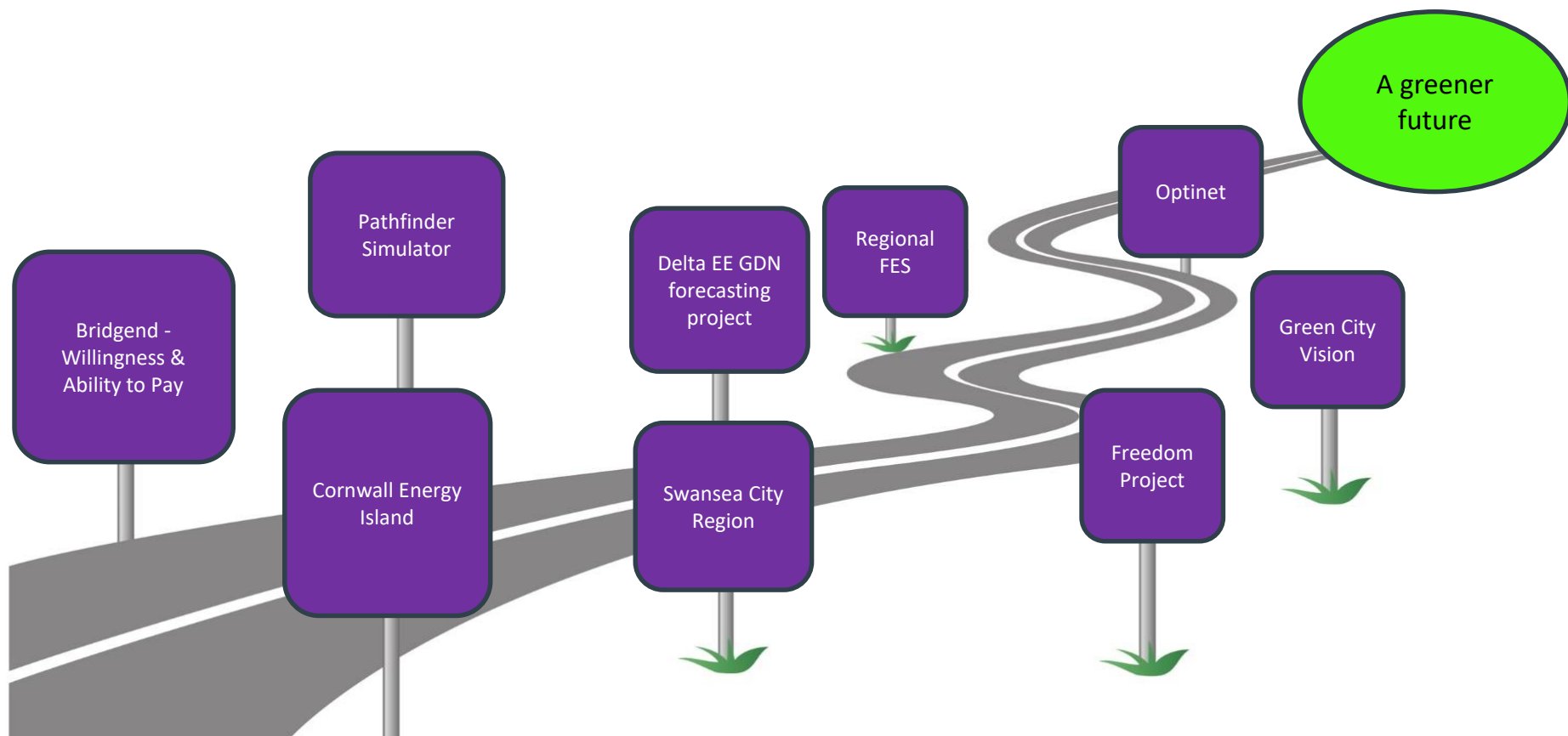
- Hybrids and Freedom extensively referenced
- Next steps – developing a new policy framework
- Enable the most cost effective transition

## Options:

- Electrification
  - Hydrogen
  - Bioenergy
- Smart hybrids cross over all three



# Our vision journey



# Why it matters

