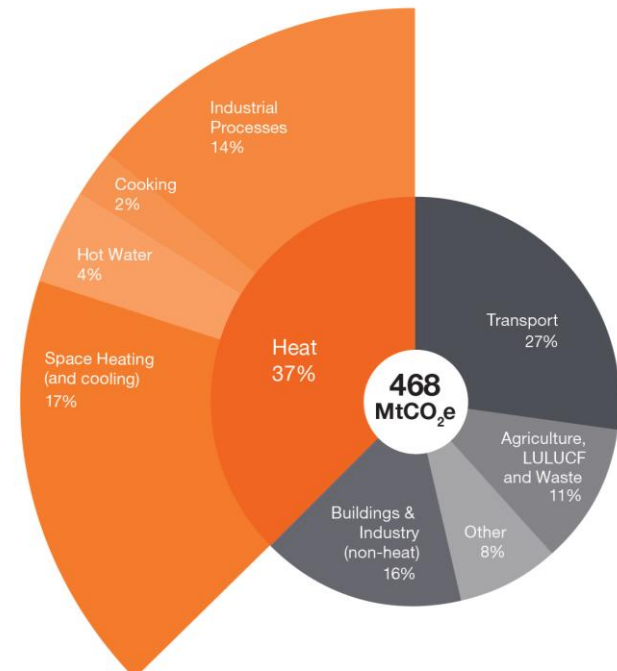
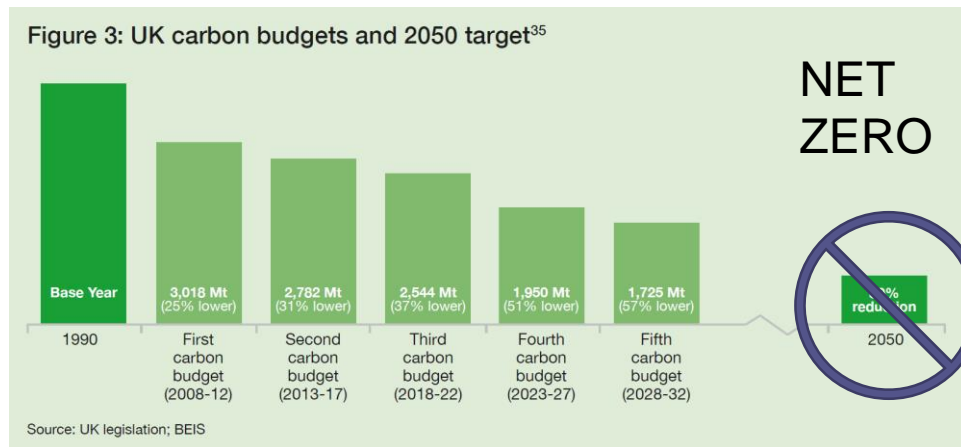


Heat Network Government Financial Support

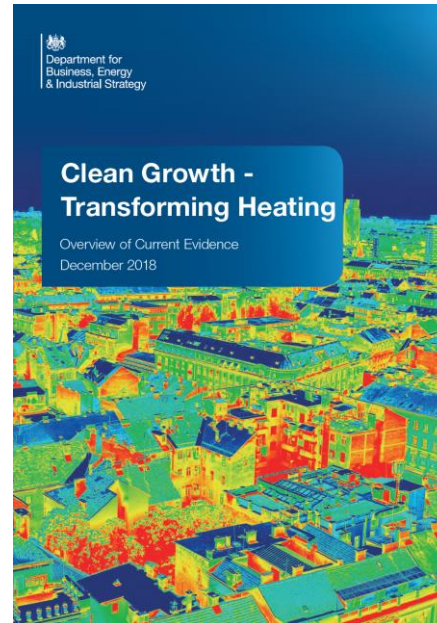
Dr Joel Hamilton PhD MEng
Heat Networks Delivery Unit, BEIS

Decarbonisation of Heat



BEIS (2018), *Clean growth: transforming heating - overview of current evidence, Report*

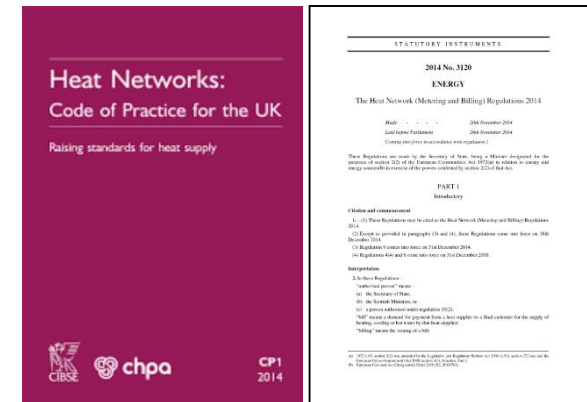
Decarbonisation of Heat – the role of heat networks



... currently only 2% of UK heat is supplied by Heat Networks!

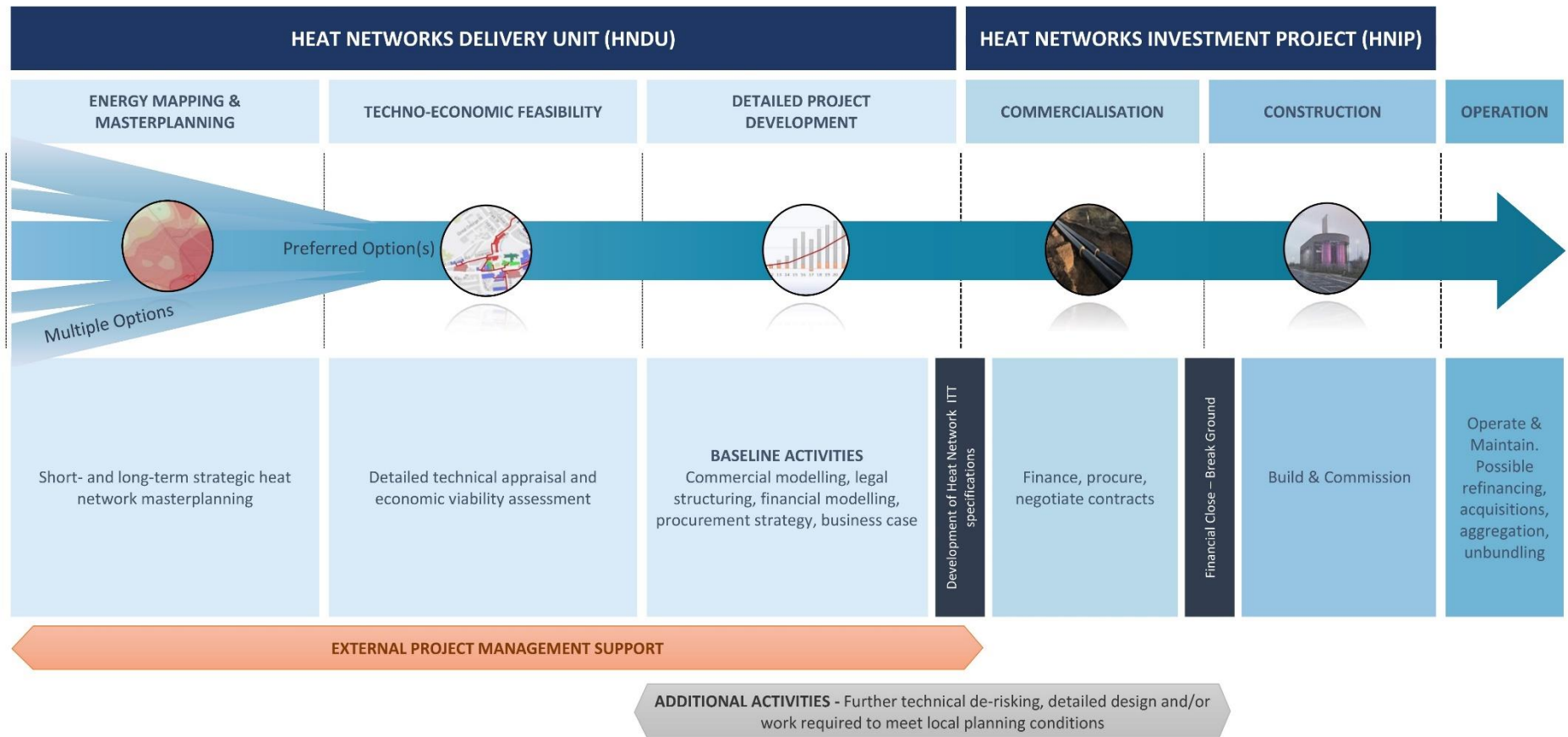
Government support for heat networks

- **Heat Networks Delivery Unit (HNDU)**
- **Heat Networks Investment Project (HNIP)**
- **Previous: Heat Network Innovation Programme**
- **Indirect :**
 - **Industrial Heat Recovery Support Programme (IHRS)**
 - **Industrial Energy Transformation Fund (IETF)**
 - **Investor list**
- **Non-Financial Support**
 - **Industry led schemes: Heat Trust and technical Code of Practice**
 - **Heat Metering & Billing Regulations**



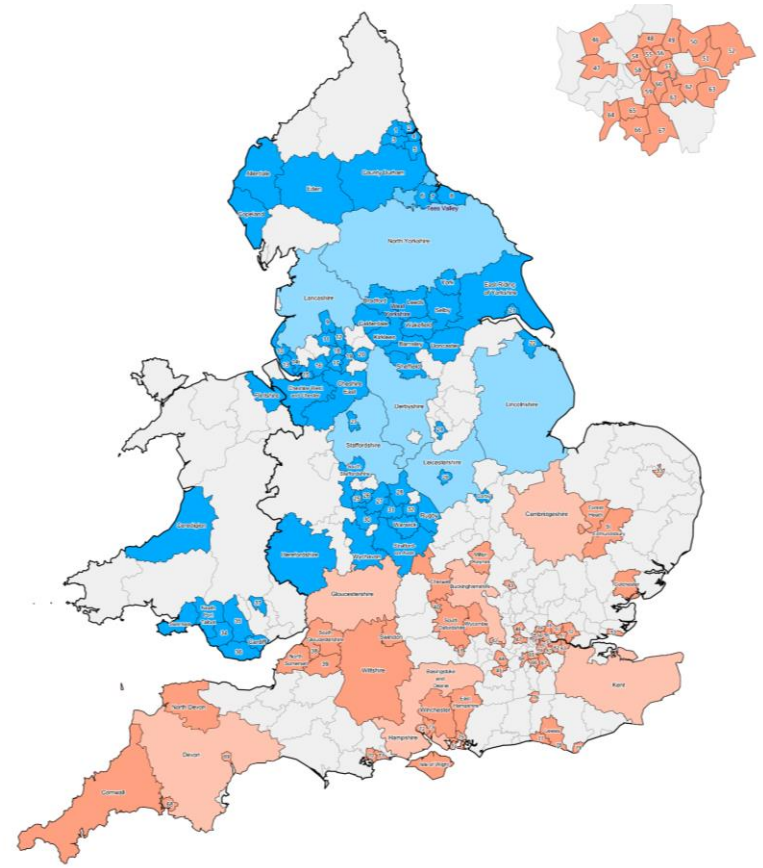
Triple Point
HEAT NETWORKS
INVESTMENT MANAGEMENT

HNDU & HNIP Separation



Heat Networks Delivery Unit (HNDU)

- Established 2013
- Ninth round of development funding
 - ERYC funded in Rounds 2 and 8
- ~£20m in grants
- 50%-67% funding available
- 140+ Local Authorities
- 220+ projects / 500+ project opportunities



Heat networks investment project (HNIP)

- Investing £320m in heat networks to 2021
- Aims to unlock £1bn of investment
- 16-17 Pilot: £19m invested in 8 projects
- Main scheme
 - Open to all applicant types
 - Grants and loans (up to 50%)
 - Delivery partner: Triple Point



HNIP aims and objectives

- To help create a self-sustaining heat network market

Increasing the **volume** of strategic, optimised and low carbon heat networks that are built in the UK



Improving the **quality** of heat networks to meet local community and consumer needs



Building the **capacity and capability** of project sponsors and the supply chain in order to develop systems of the right type and quality

Previous: Heat Network Innovation Fund

- **£7m Innovation fund (£6m awarded)**
- **Key objectives included:**
 - **support the deployment of low carbon heat networks out to 2050;**
 - **demonstrate the successful integration of innovative technologies and techniques on heat networks;**
 - **provide real world evidence on reducing costs and improving energy efficiencies;**
 - **improve the customer experience of heat networks; and**
 - **increase Government's understanding of heat network innovators and the heat network technology supply chain.**

Previous: Heat Network Innovation Fund

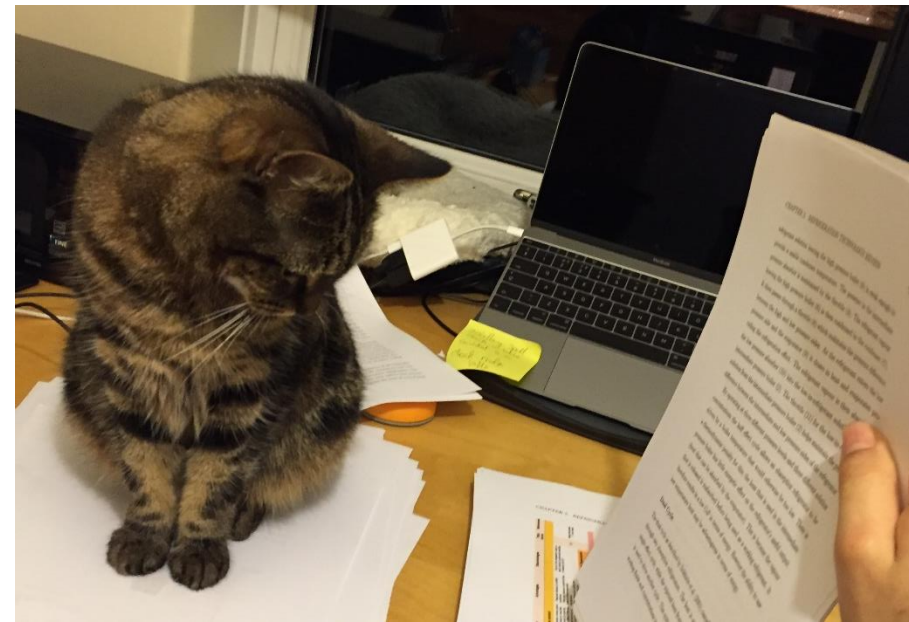
- **Topics:**
 - **Solar thermal, heat pump, PV and thermal storage integration**
 - **Ambient loop / 5G**
 - **Automated optimisation**
 - **Seasonal storage**
 - **Air source heat pump in summer to borehole for ground source in winter**
 - **Deep geothermal**
 - **Mini BEMS**
 - **Heat metering and insources billing**

Indirect Funding

- **Funding that could be used to supply energy to heat networks**
- **Industrial Heat Recovery Support Programme (IHRS)**
 - Supports recovery of industrial waste heat
 - £18m fund
 - Feasibility studies and implementation
- **Industrial Energy Transformation Fund (IETF)**
 - £315m
 - Under development – Watch this space!

Non-Financial Support

- **BEIS offers guidance and reviews published material**
 - **Code of Practice**
- **Heat Trust**
 - **Launched in November 2015**
 - **Common standard in the quality and level of customer service**
 - **Provides an independent process with the Energy Ombudsman for settling complaints**
 - **Managed by Heat Customer Protection Limited – a not-for-profit company.**



Conclusions: Government support for heat networks

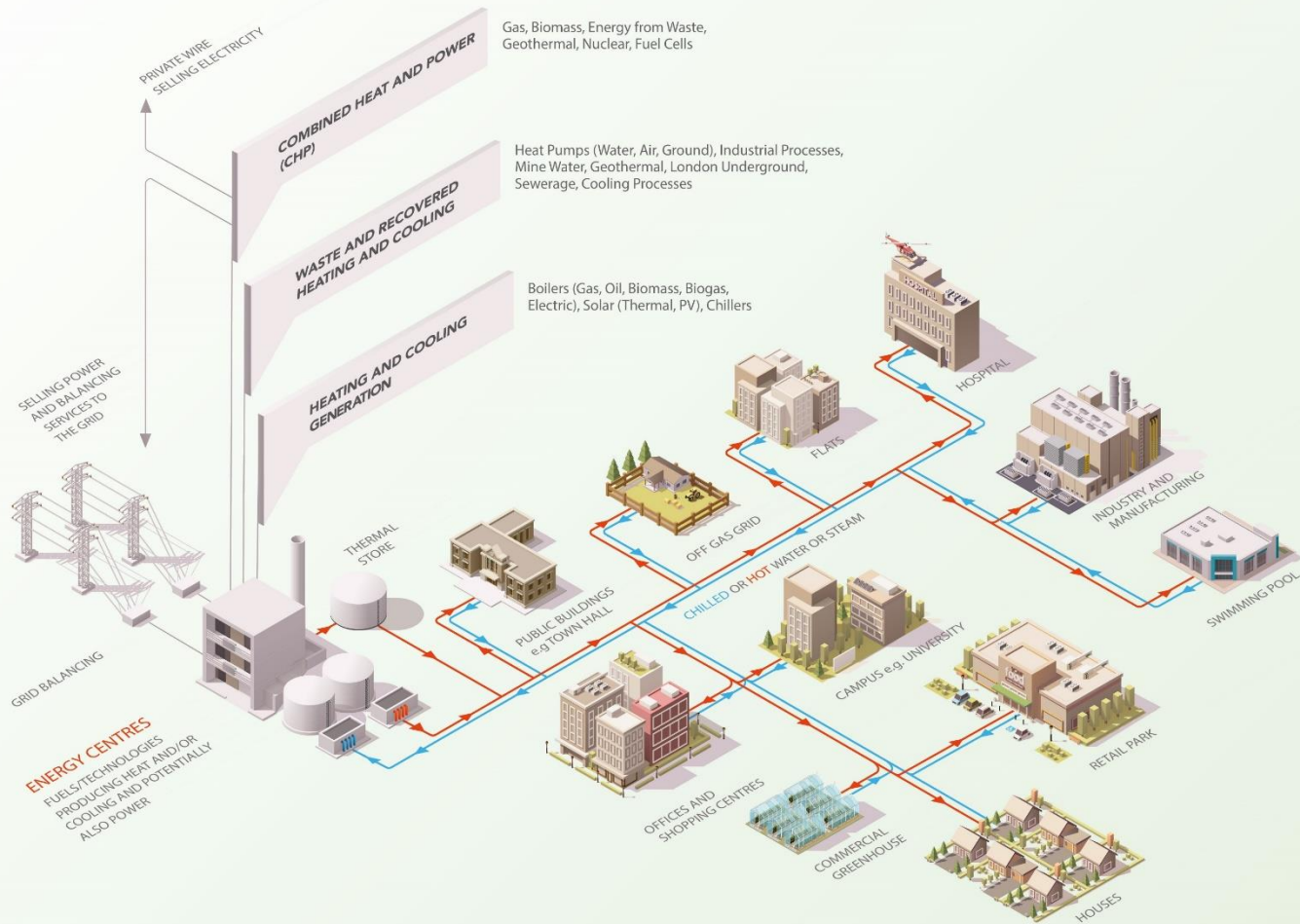
Why?

- **Net Zero**
- **Heat accounts for 37% of UK carbon emissions**
- **Route to decarbonising heat**

How

- **Heat Networks Delivery Unit (HNDU)**
- **Heat Networks Investment Project (HNIP)**
- **Previous: Heat Network Innovation Programme**
- **Indirect :**
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 - **Industrial Energy Transformation Fund (IETF)**
- **Non-Financial Support**





Questions and Answers

