



# HEAT NETWORK EFFICIENCY SCHEME



# Welcome



**Please mute microphones if you're not speaking to limit disruption**



**Please also turn off webcams to improve video quality**



**Ask questions using the Q&A functionality**



# Agenda

Session	Speaker
Introduction to Heat Network Opportunity	Samantha Shea, Gemserv
Customer experience of Heat Networks	Stephen Knight, Heat Trust
Introduction to HNES	Louise Singleton, Gemserv
HNES Case Study	Chloe Jenner and Isobel McGuinness, The Guinness Partnership
Q&A	



# Introduction to Heat Network Opportunity

Samantha Shea

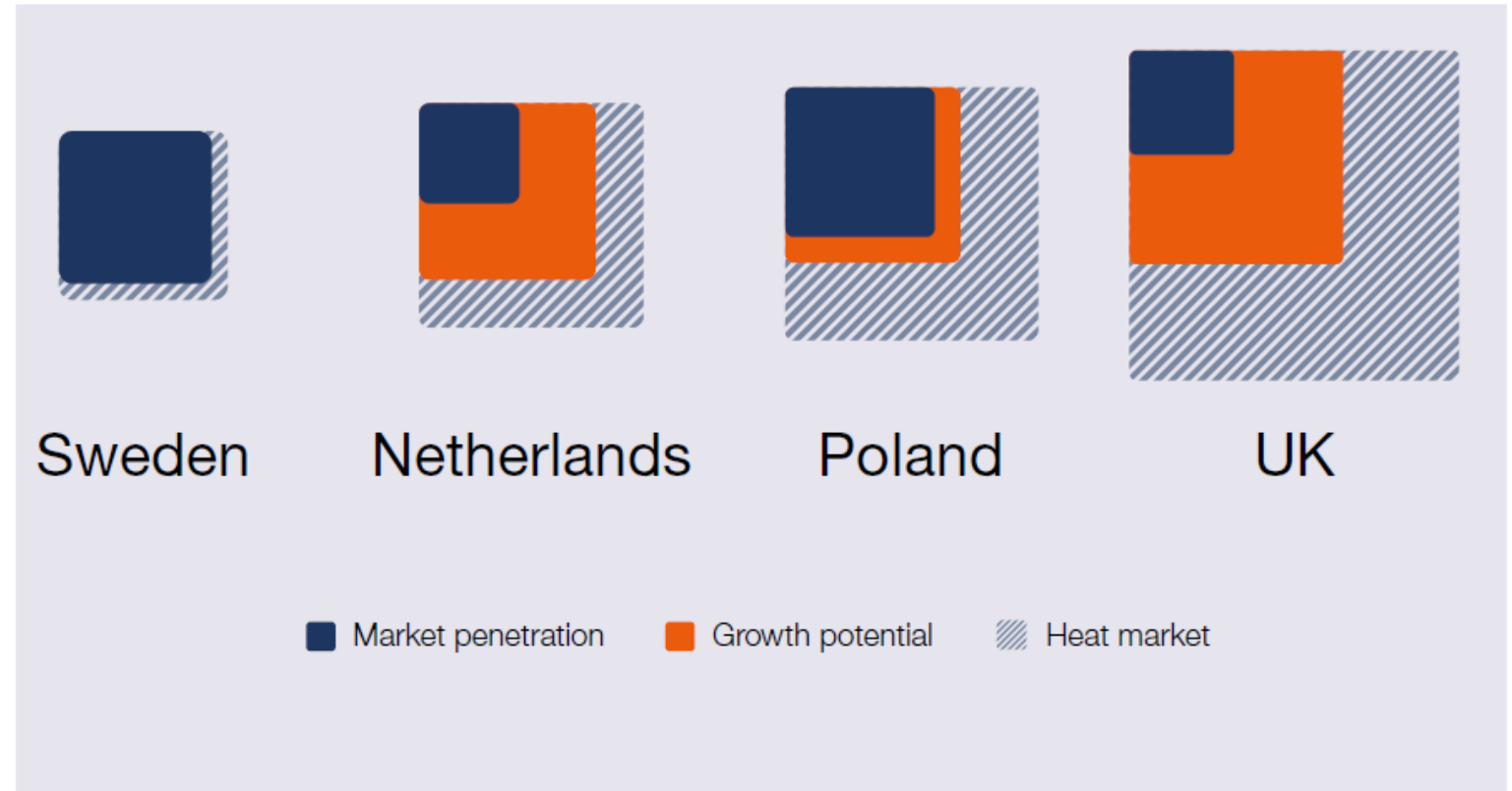
Gemserv



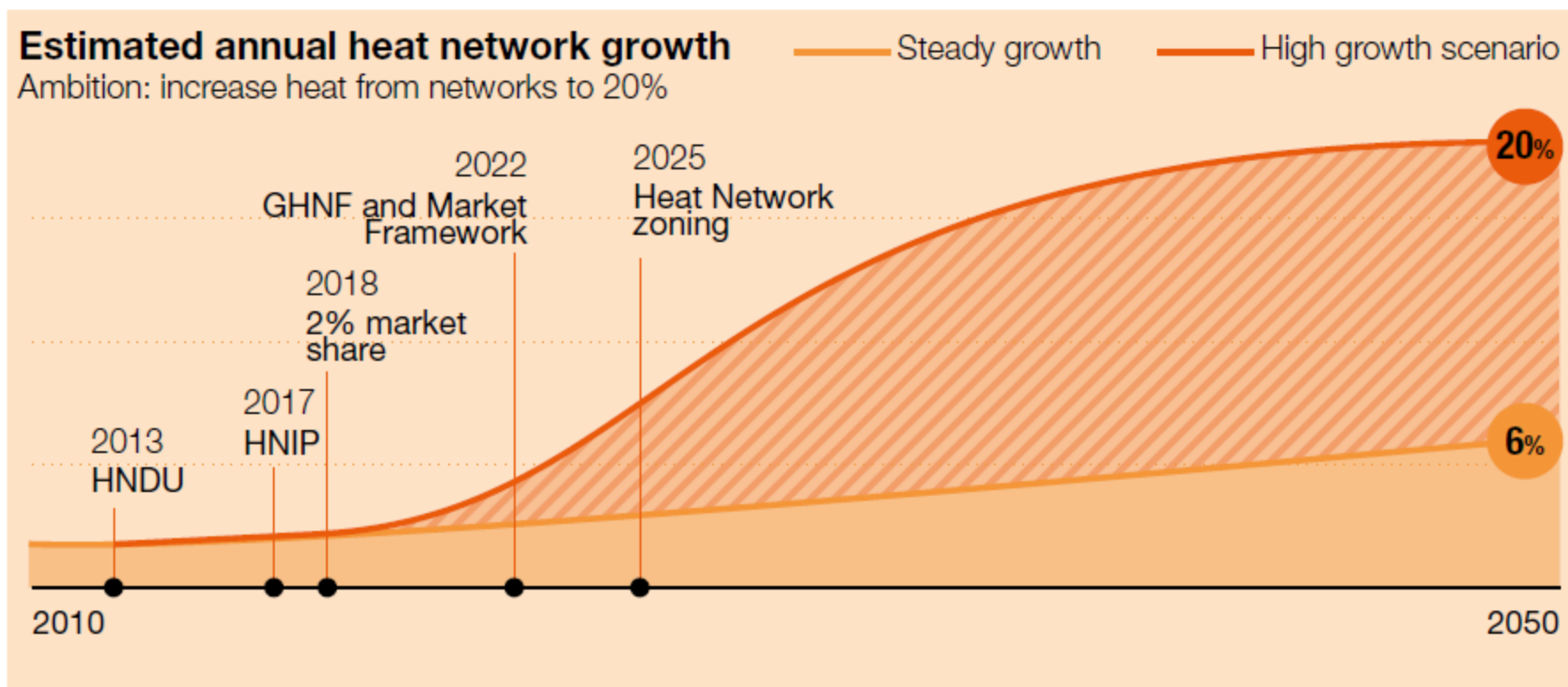
# Scale of the opportunity

Current market share vs future market share (%) in the Climate Change Committee, Net zero scenario. Of the total heat market:

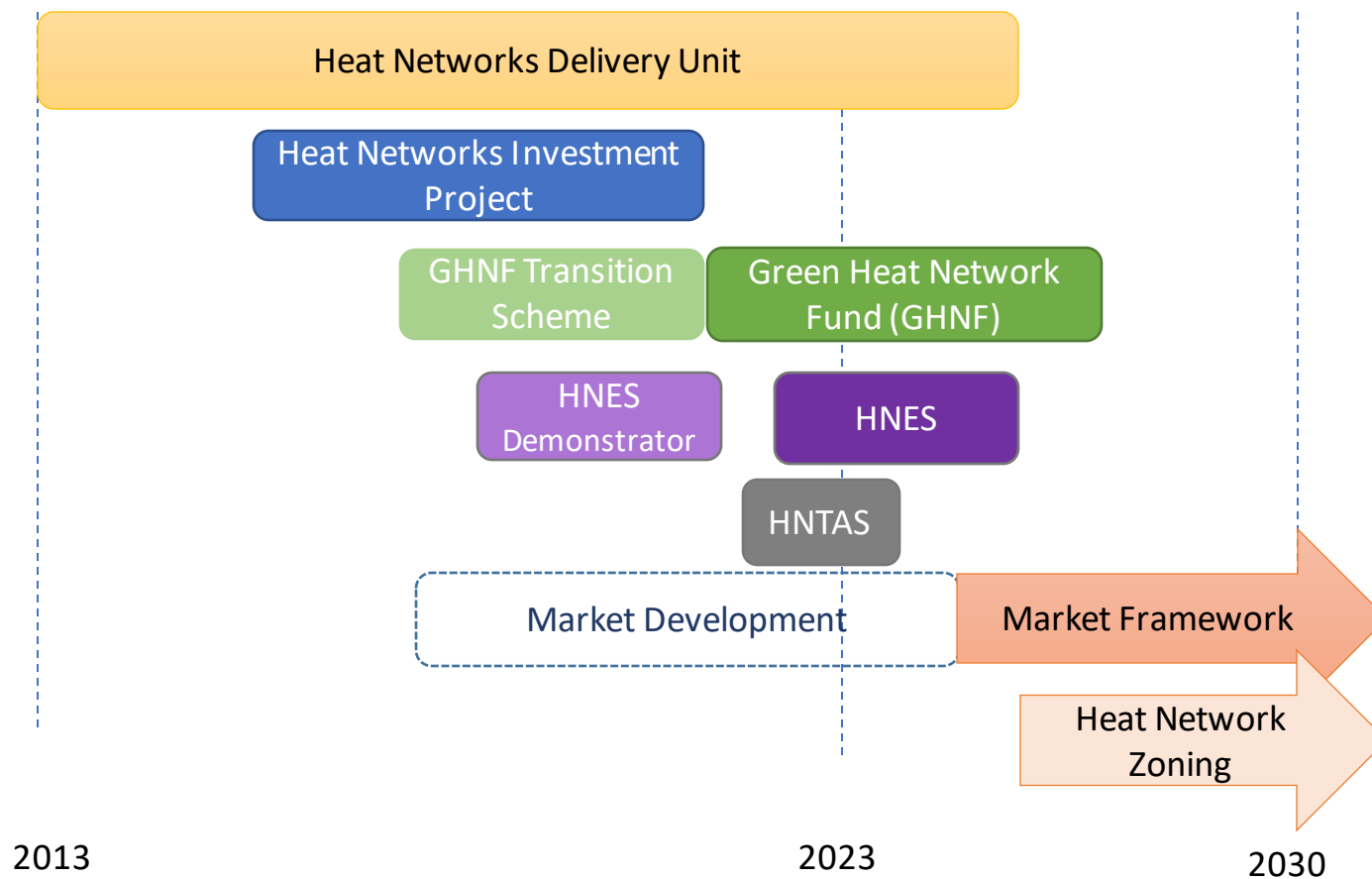
- in 2022 it was less than 3%
- in 2050 it will be 20%



# Accelerating growth



# Developing the heat network market



# Have your say

- Ofgem and the Department are seeking views on consumer protection.





# Customer experience of Heat Networks

Stephen Knight  
Heat Trust





HEAT NETWORK  
EFFICIENCY SCHEME



# Heat Network Performance and consumer detriment

**Stephen Knight**

Director, Heat Trust



# Heat Trust

Independent consumer protection scheme & consumer champion

## Heat Trust is the national independent consumer protection scheme for heat networks

- Established in 2015
- Consumers on networks registered with us get:
  - **Guaranteed Service Standards** – and **compensation** when these aren't met (based on similar standards set by Ofgem for gas and electricity customers)
  - Protection for **vulnerable customers**
  - Access to the **Energy Ombudsman** for independent dispute resolution
  - We monitor and audit suppliers to these standards
- Over 73,000 consumers currently protected by our scheme on 116 registered heat networks.



# Consumer experience of heat networks

Energy crisis has overturned an era of cheap gas

## High Gas costs mean efficiency really matters

Many heat network customers have seen extremely high prices over the past few years

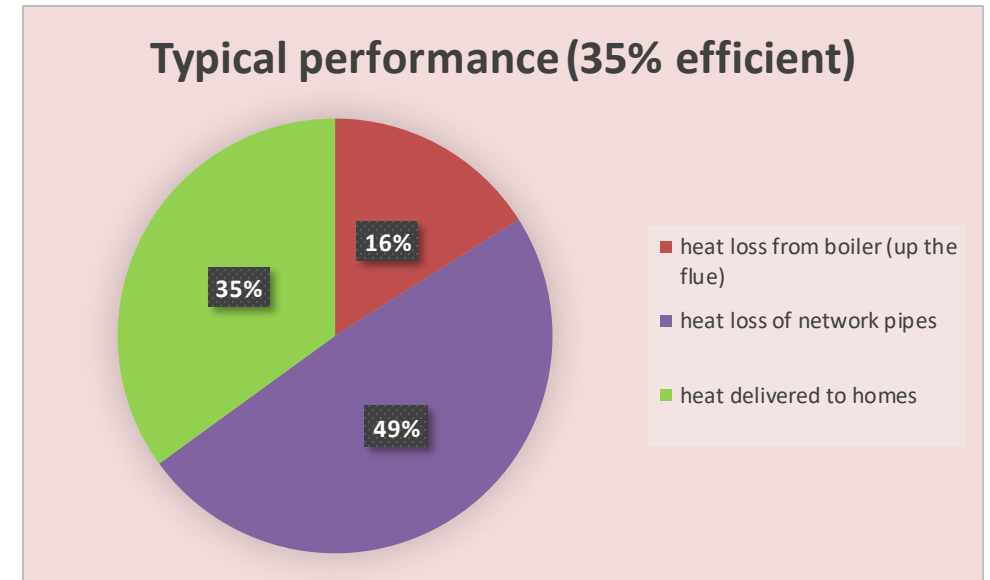
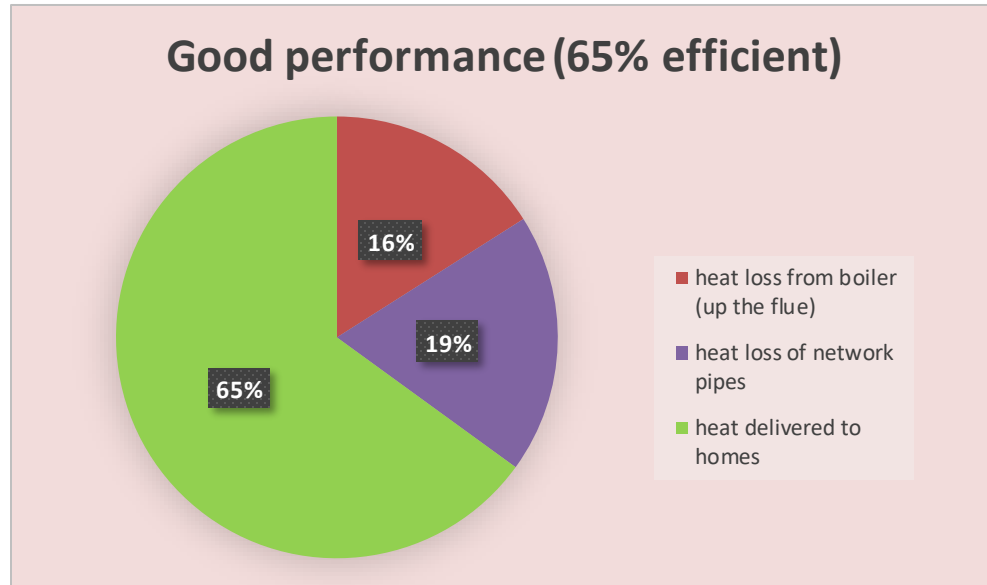
- Massive/volatile price rises in **commercial energy** (No price cap) (from 1.5p to 20p /kWh)
  - Much less generous price subsidy (EPG v EBRS/EBDS)
  - **Poor efficiency (30-40% fairly typical)**
- 
- Examples of heat prices of **50p/kWh+** (compared to a peak of ~12p/kWh for domestic gas customers)
  - Examples of price rises of up to **700%**
  - Some council tenants paying **£50-60 per week** for hot water/heating



# Consumer experience of heat networks

Why efficiency matters

## Efficiency, heat losses & price



Cost of heat (assuming gas cost of 7.83p/kWh):

**12 p/kWh**

**(29% more gas/CO<sub>2</sub> than a domestic boiler)**

Current domestic gas boiler  
heat cost: **8 p/kWh**

Cost of heat (assuming gas cost of 7.83p/kWh):

**22 p/kWh**

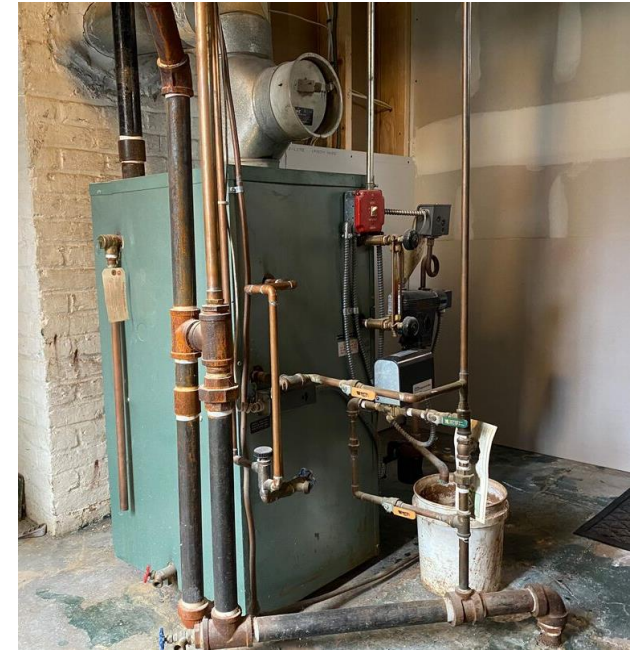
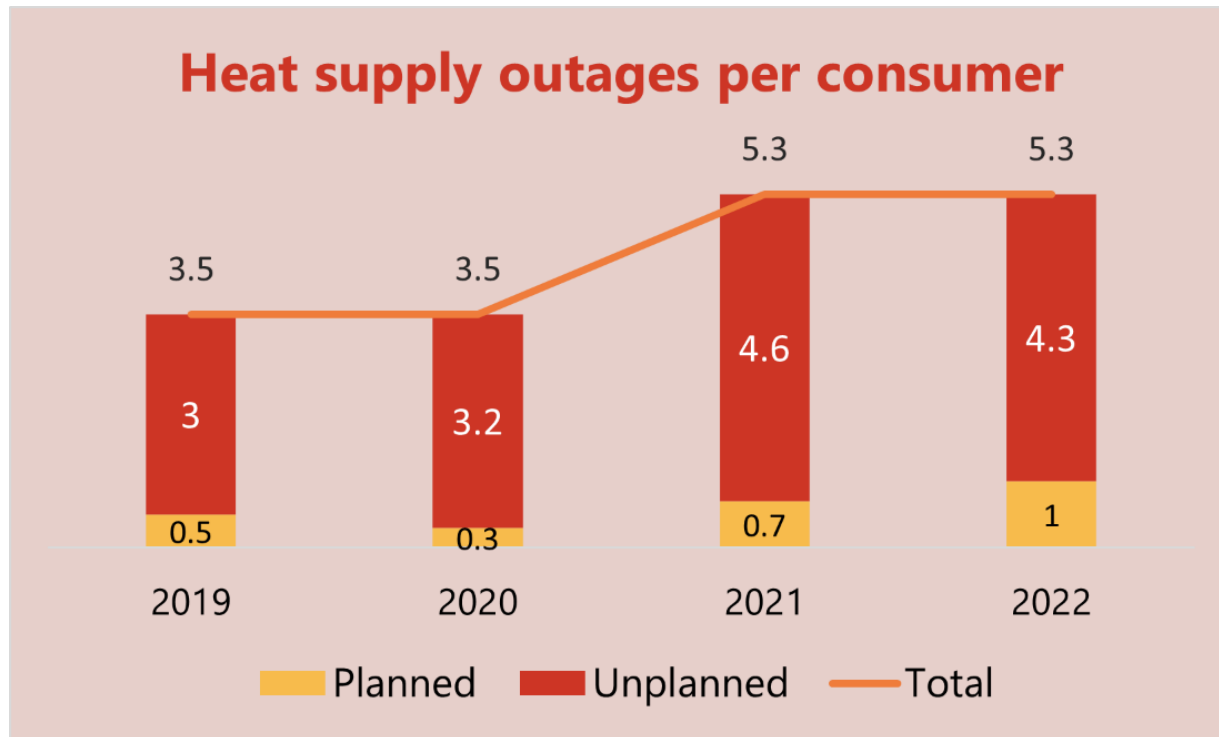
**(140% more gas/CO<sub>2</sub> than a domestic boiler)**



# Reliability

Too many unplanned supply interruptions

Average customer experienced 5 supply interruptions in 2022  
(Average duration 5hr:39m each)

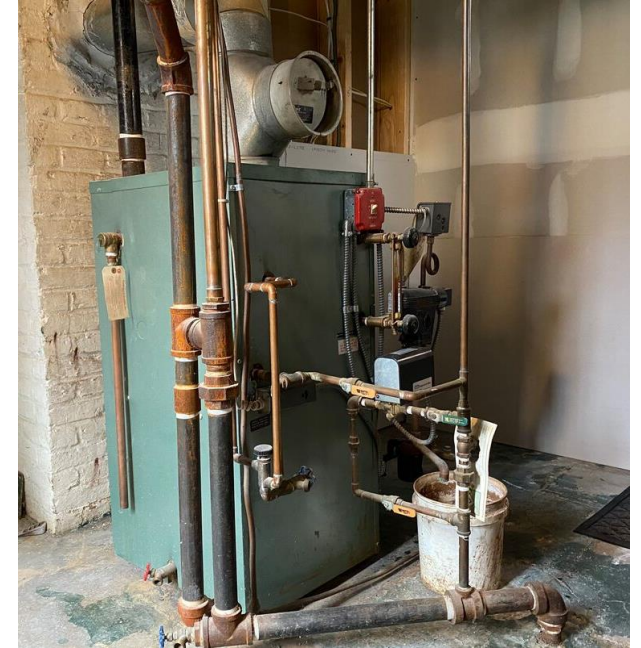
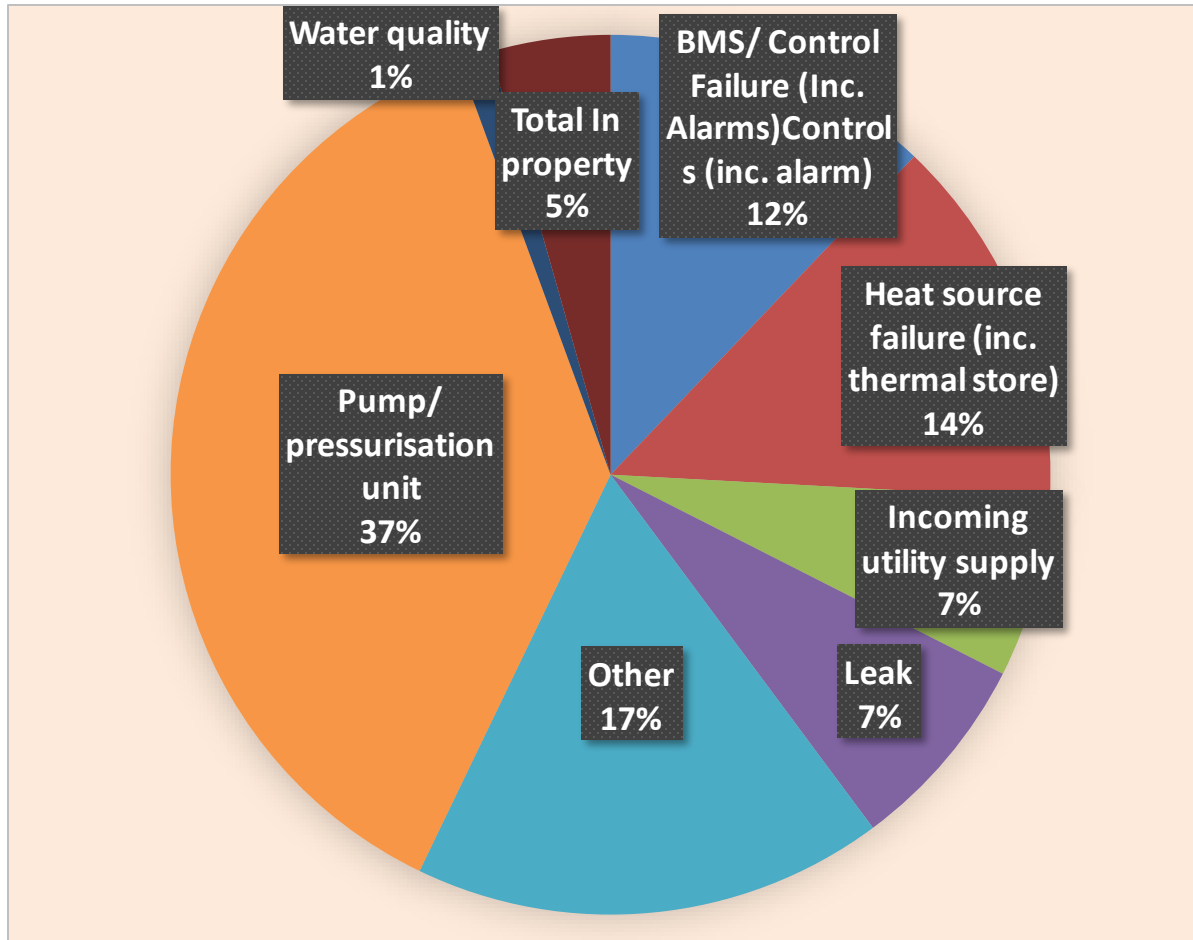


Heat Trust registered sites are likely to be amongst the most reliable, so the average across the sector could be much worse!



# Reliability

## Causes of unplanned interruptions



Pump failure could be a symptom of a poorly optimised network, or poor water quality

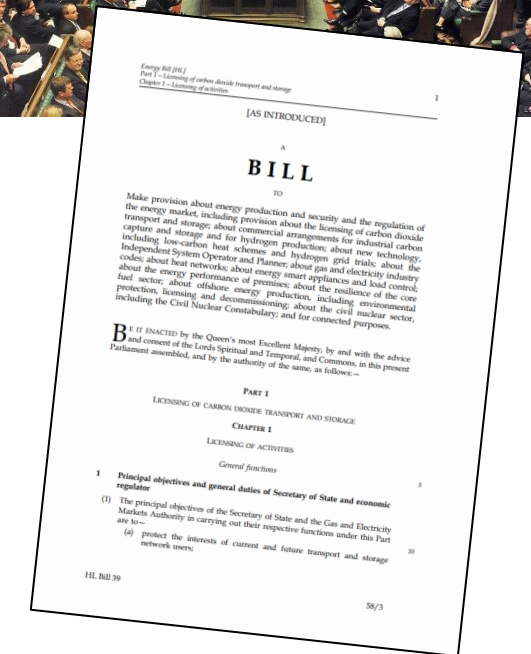


# Heat Network regulations – mandatory technical standards

View of the consumer champion for heat networks

**Energy Bill** introduces regulation of heat networks

- Mandatory technical standards (Heat Network Technical Assurance Scheme) across Great Britain.
- All heat networks will need to meet minimum levels of performance
- Regulations due to start in 2025
- Legacy heat networks to be given some years to achieve certification of 'good' performance





# Questions?

Stephen Knight, Director

[stephen.knight@heattrust.org](mailto:stephen.knight@heattrust.org)

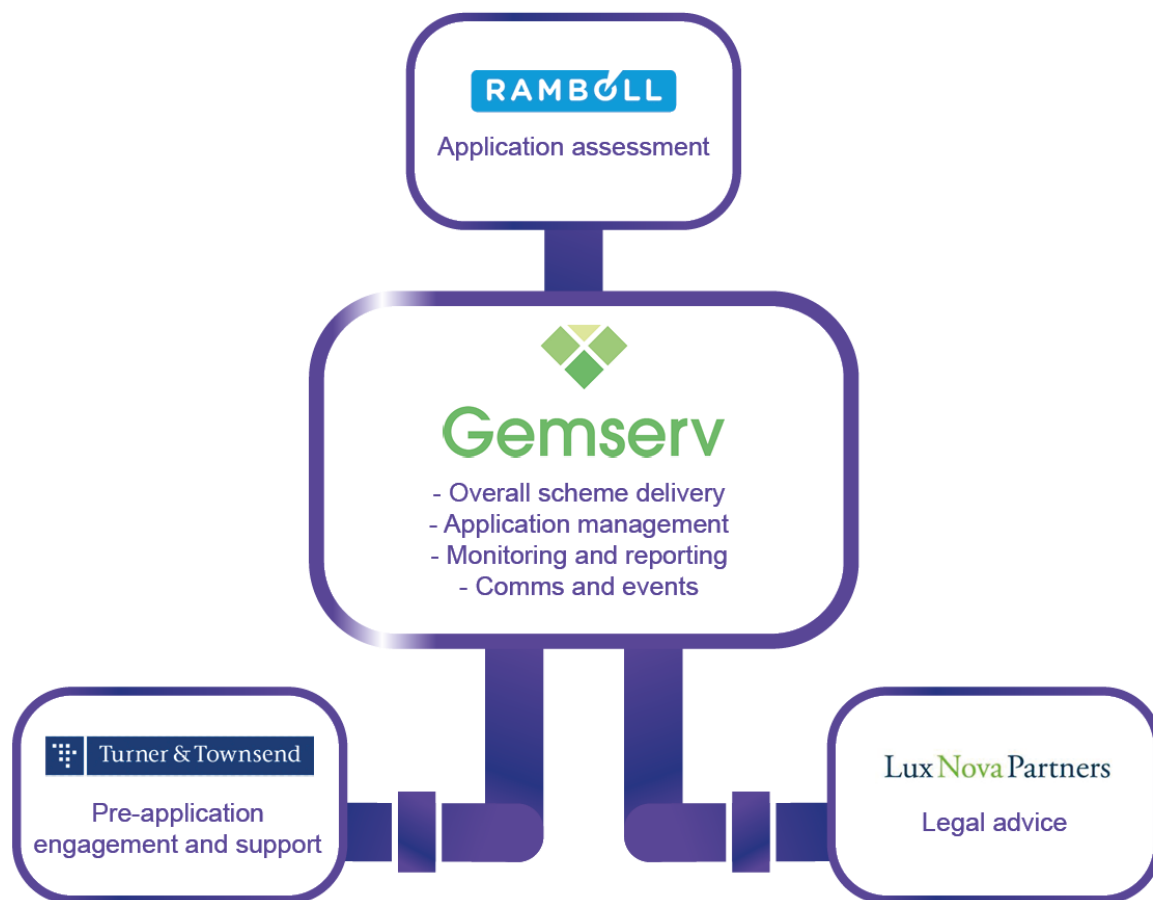


# Introduction to HNES

Louise Singleton  
Gemserv



# HNES Delivery Partner



- Gemserv and Ramboll have already successfully delivered the HNES Demonstrator together, supporting 110 projects to claim £5M+ in grant funding
- Turner & Townsend and Lux Nova have joined the Delivery Partner team for the Main scheme



# Aims and Objectives of HNES

1. Reduce carbon emissions by making heat networks more efficient
2. Reduce customer detriment to improve consumer confidence
3. Help prepare the heat network market for sector regulation and technical standards



# How much funding is available?

## Revenue Grants

Full funding available for procurement or mobilisation of external third-party support to carry out Optimisation Studies.

These studies will assess heat network projects to identify causes of sub-optimal performance and recommend costed intervention or improvement measures.

Up to £2m across FY23/24 and FY24/25

## Capital Grants

Part funding  
**(up to but not including 50%)**  
available for the delivery (installation) of eligible intervention / improvement measures.

Up to £30m across FY23/24 and FY24/25

- Projects can apply for funding across both financial years, but must spend all funding within each allocated financial year
- Match funding does not have to be spent at the same time as grant funding
- Revenue funding for FY23/24 has all been allocated, however applications can still be submitted for spend in FY24/25. Projects can start before April 2024 but funding can't be claimed until 1<sup>st</sup> April 2024



# Who can apply?

Operators of  
existing district  
heating networks  
or communal  
heating systems

Public sector,  
private sector or  
third sector  
organisations

Heat networks  
situated in  
England or  
Wales

Legal entities,  
with authority to  
sign-off  
investment  
decisions for the  
heat network  
they are  
responsible for



# Funding round closing dates

Round	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
Round 5		★ Friday 10 <sup>th</sup> November 2023						
Round 6					★ Friday 2 <sup>nd</sup> February 2024			
Round 7						★ Friday 22 <sup>nd</sup> March 2024		
Round 8								★ Friday 10 <sup>th</sup> May 2024



# Round 1 projects announced

£13.9 million awarded in the first Heat Network Efficiency Scheme funding round – Gemserv press release

Examples of capital projects include:

- upgrading pipework
- improving insulation
- updating controls
- replacing HIUs
- improving water quality
- reducing leaks





# Where to find help and support

If you have a general enquiry about HNES, want to be added to our mailing list, or would like an application form, please email [hnes@gemserv.com](mailto:hnes@gemserv.com)



Louise Singleton



Samantha Shea



Sam Hales



Neil Smillie



Billy Clifflen



Chris Forster



Elin Pain

To discuss your project in more detail with one of our Relationship Managers, please email [hnes.support@gemserv.com](mailto:hnes.support@gemserv.com)

DESNZ has published eight heat network optimisation guidance videos, which can be accessed on the [gov.uk](https://www.gov.uk) website

Further detail on the scheme can be found in our [HNES Guidance for Applicants](#) document

# HNES Case Study

Chloe Jenner and Isobel McGuinness  
The Guinness Partnership





# The Guinness Partnership HNES Funding Experience

12<sup>th</sup> October 2023

great service, great homes  
a great place to work and a great business

## Introduction

- The Guinness Partnership are a social landlord across 12 local authority areas in England.
- We have 140,000 customers and around 64,000 homes.
- Waverley Court is a 1970s high-rise tower block of flats where we completed a retrofit into a fourth generation heat network.
- Our planned retrofit project was HNES funded and led by Fairheat.

## Problems at Waverley Court

- Overheating
- High energy costs
- Poor reliability
- High Maintenance costs
- Lack of resident control



## Customer Engagement at Waverley Court

- Waverley Court engagement included:
  - Customer engagement days before, during and after the project.
  - Calls, letters, texts messages, emails and face to face.
  - Resident Liaison Officer on site.
  - Support of the Customer Liaison Officer for the area.
  - Due to complete customer satisfaction surveys Oct/Nov 23.

## Lessons Learnt

- Resident access
- Customer communications
- Asbestos removal
- Work required



## Bearbrook Place

- Bearbrook Place is a 2000s low rise building with 28 dwellings.
- All customers who live here are 'vulnerable'.
- The Guinness Partnership submitted a HNES bid for round one and our bid was successful.
- All dwellings will have new HIUs installed on the existing heat network.
- No work to be carried out in boiler room.





**Any questions?**



# Q&A



## HEAT NETWORK EFFICIENCY SCHEME



Department for  
Energy Security  
& Net Zero



Gemserve

RAMBOLL

Turner & Townsend



HEAT NETWORK  
EFFICIENCY SCHEME

# Follow our social media accounts



[Heat Network Efficiency Scheme \(HNES\)](#)



[@HNEScheme](#)

## Join our mailing list



[hnes@gemserv.com](mailto:hnes@gemserv.com)

