

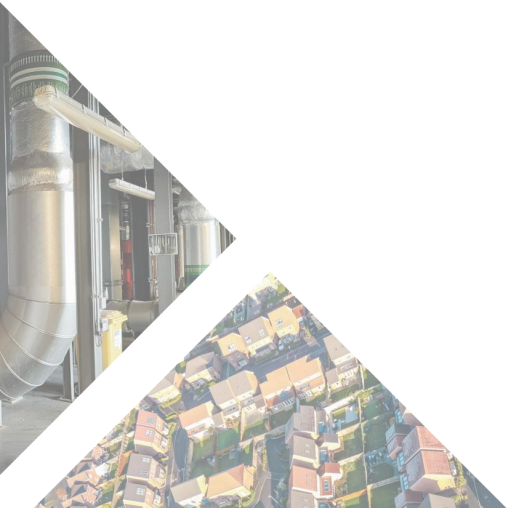


# HEAT NETWORK EFFICIENCY SCHEME



# Welcome and Agenda

Christina Thompson-Yates



# Welcome



**Please mute microphones to limit disruption**



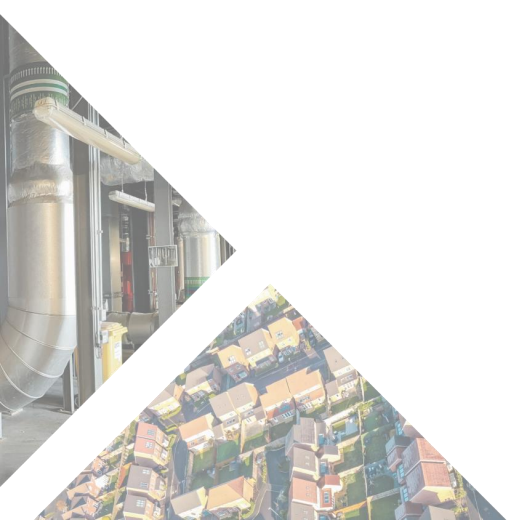
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**Please ask questions using the Q&A functionality**



**This seminar will be recorded and slides distributed after**



# Agenda

| Session                          | Speaker                  |
|----------------------------------|--------------------------|
| Introduction to HNES             | Louise Singleton         |
| Application Process              | Sam Hales                |
| Assessment Process               | Louise Singleton         |
| Support available for applicants | Christina Thompson-Yates |
| Q&A                              | Christina Thompson-Yates |

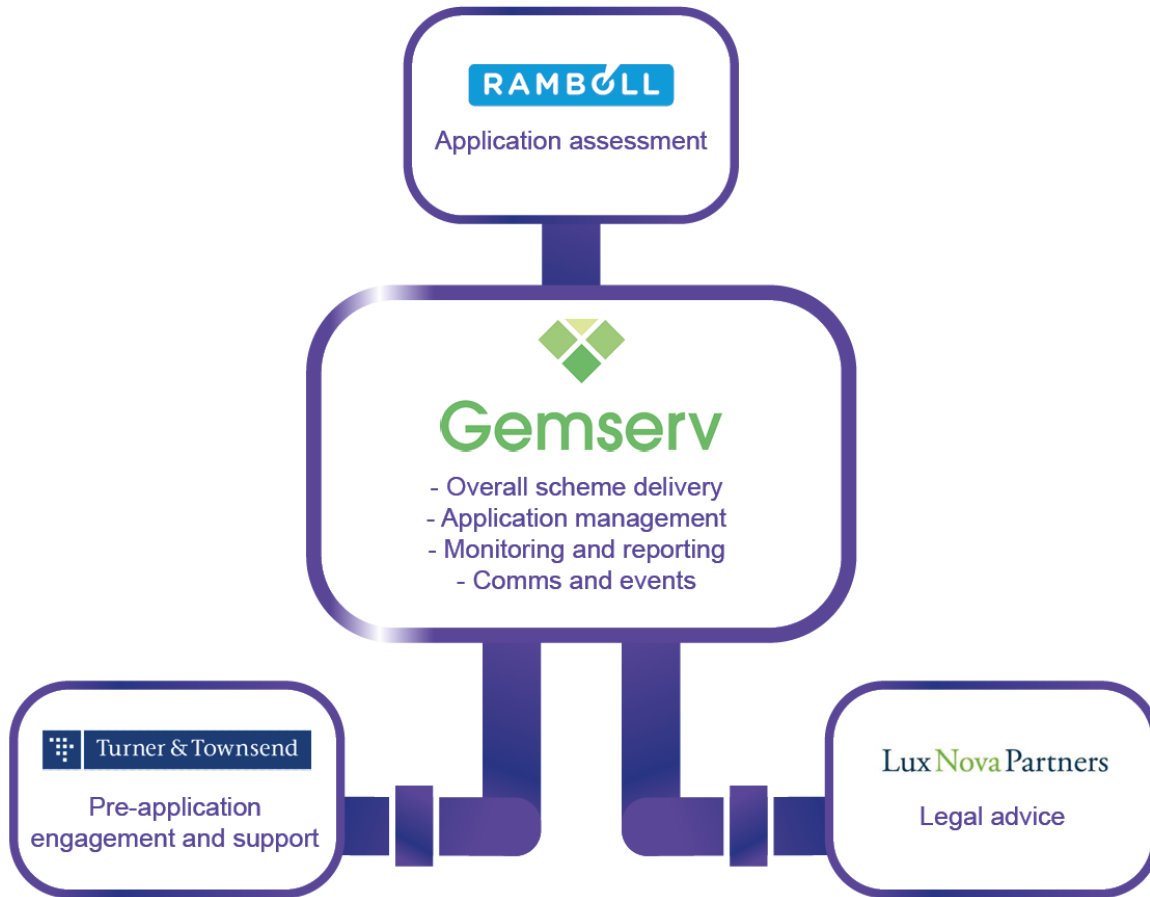


# Introduction to HNES

Louise Singleton  
HNES Programme Manager



# 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?

## 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

## 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

- 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
- In March, the Government confirmed that capital support for heat networks would be extended to 2028, including an additional £220 million for the Heat Network Transformation Programme over 2025/26 and 2026/27. We expect to make further announcements on funding allocations in due course





# 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

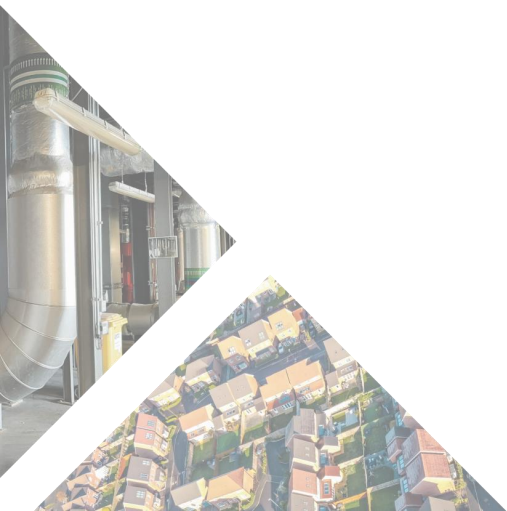


# Funding round closing dates

| 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 |



# HNES Eligibility Criteria



# Capital grants

## Eligible costs

- Category 1: Energy centre / plant room
- Category 2: Primary / secondary distribution network
- Category 3: Tertiary network
- Category 4: Metering



## Ineligible costs

- Any capital costs already **incurred prior** to an HNES award having been made
- Any capital costs **unrelated** to heat network infrastructure, e.g., improvements to building fabric
- Any costs relating to **engagement activities** (e.g., stakeholder management)
- Energy centre / plant room – costs for **replacement** of the primary heat generation source
- Tertiary systems – costs for **buying or replacing heat emitters** (e.g., radiators) within buildings or dwellings
- Metering – costs for metering that is required under the **HNMBR**

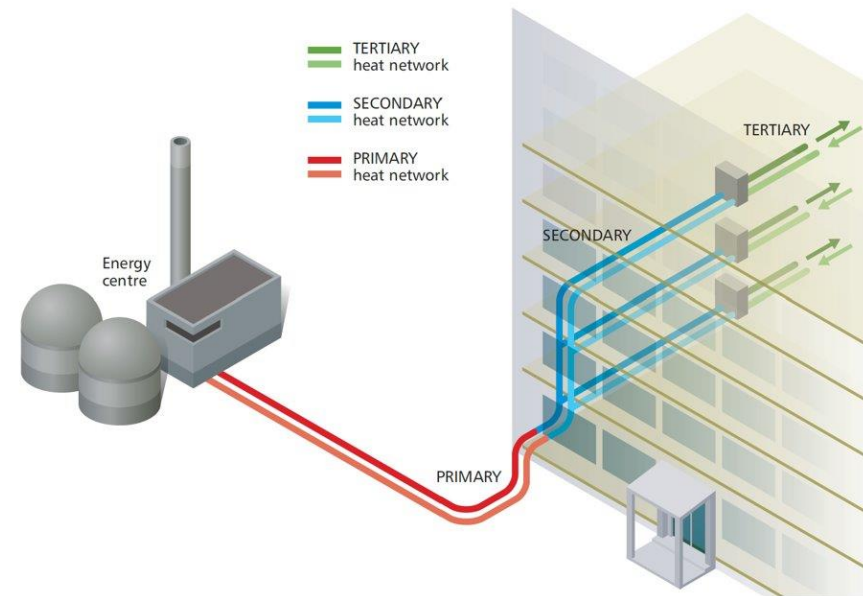
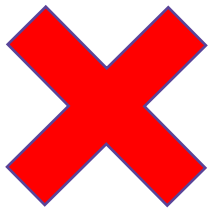


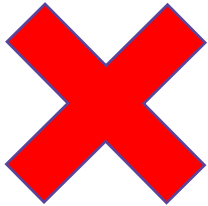
Image: Heat networks CP1: 2020

# Revenue grants



## Eligible costs

- Optimisation Studies delivered according to the outline specification provided in Annex A of the Guidance for Applicants document



## Ineligible costs

- Work **already commissioned** or incurred before the application
- Internal applicant staffing or secondment staff or charged agencies within applicant organisations, including for **project management** of the third party support / Optimisation Studies
- **Construction, operation and maintenance** of a heat network



# WP1 – Network Operational Performance

**Aim** – to investigate the current operation and condition of the network in order to develop a baseline against which optimisation measures can be developed and their impact quantified (WP2)

**Outputs** – heat network operator understands the causes of sub-optimal performance and the impact of these on the operation of the network and on customers

## Steps

1. Data capture / analysis and site visit(s)
2. Baselining of network performance and KPIs
3. Analysis of network performance, including reporting



# WP2 – Network Optimisation Opportunities

**Aim** – to identify potential optimisation measures and quantify the costs and impacts that implementing these could have on network performance

**Outputs** – heat network operator receives clear and robust analysis to define a pathway to improving customer outcomes and operational performance of the network

## Steps

1. Development of optimisation measures and packages of measures
2. Cost and cost-effectiveness assessment of intervention measure packages
3. Reporting and recommendations



# Final Deliverables

Project Report

Summary site visit report

Techno-economic analysis spreadsheet

Final submission of Revenue M&R worksheet  
(including Optimisation Study Outputs Annex)

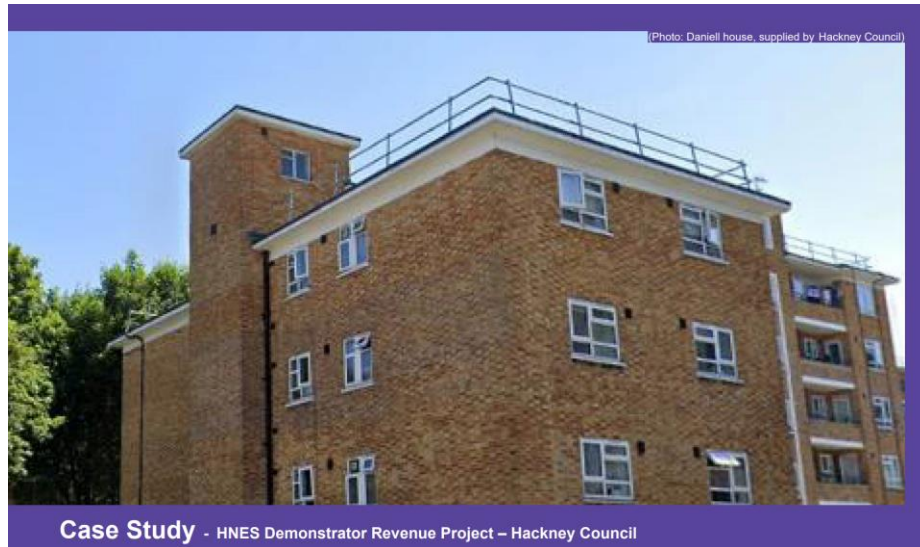
**OPTIONAL**

Completed HNES Capital Grant Application Form

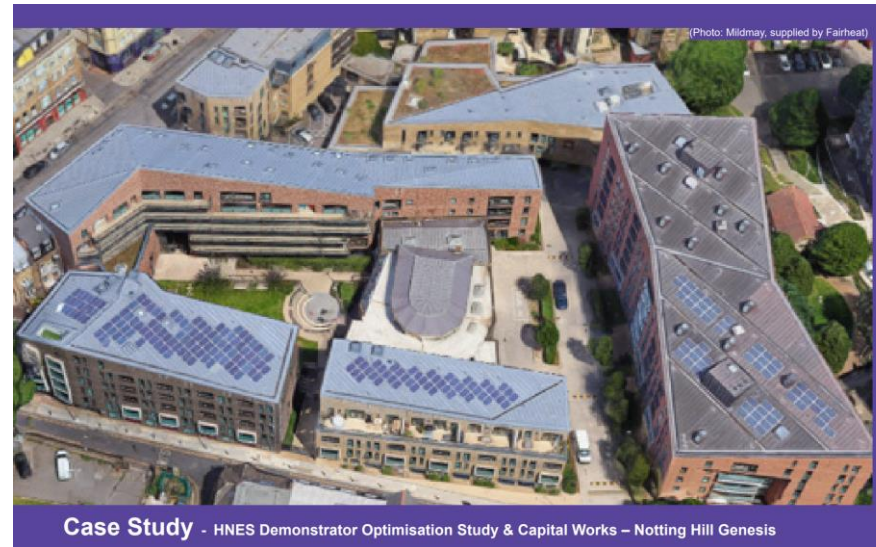




# Example HNES Demonstrator projects



Hackney Council received around £41,000 to undertake two Optimisation Studies improve the efficiency and performance of each network, which in turn would ensure all costs were being recovered, lower the administration of the networks, applied across their entire heat network portfolio. They appointed Chirpy Heat, visits identified 18 efficiency measures. If implemented, these would save £3,000 and 676 tonnes of carbon emissions over a 20-year period. Hackney now intends implement the measures identified and has secured HNES capital funding for this.



Notting Hill Genesis received around £310,000 from the HNES Demonstrator for their Mildmay heat network. The Mildmay heat network provides heat to 139 residential connections, a hospital, and a church. The system suffered from high flow rates and return temperatures and very hot water, particularly during peak hours.

Three main areas for improvement were identified, with poor HIU performance found in 50% of dwellings, alongside poor water quality, a complex hydraulic design, and an inadequate control strategy. Funding provided to the network enabled interventions which resulted in lower flow and return temperatures being achieved across the network and a 32% reduction in gas consumption, resulting in lower bills for residents and lower carbon emissions.



# 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:

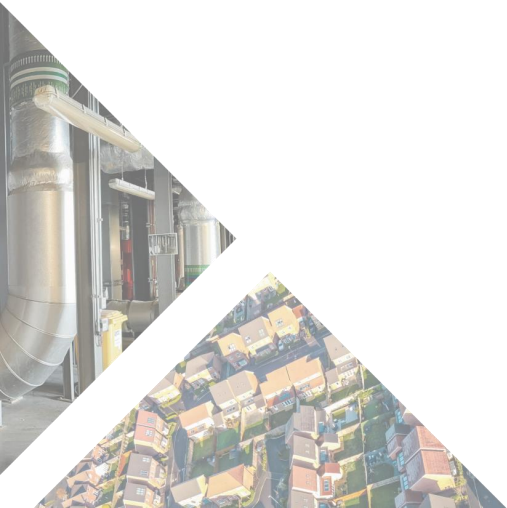
- upgrading pipework
- improving insulation
- updating controls
- replacing HIUs
- improving water quality
- reducing leaks



# Application Process

Sam Hales

Applicant Support and Relationship Management Lead



# Application form tabs overview

## A – Applicant Info

- Applicant organisation information and parent company if relevant
- Contacts relating to application

## B – Project Info

- Description of the network including address
- Network characteristics including proportion of dwellings that fall under the HNES definition of ‘customers in need’
- Regulatory i.e. HeatTrust registration, HNMBR etc

## C – Project Narrative

- Overview of project and funding request
- Overview of network data availability, quality and metering
- Overview of the rationale for the funding application to HNES in relation to Objectives 1 (reducing carbon emissions by making networks more efficient) & 2 (reducing customer detriment)
- Approach to dissemination information i.e. communication methods and means
- Sub-optimal outcomes experienced



# Application form tabs overview

## D – Baseline and Target

- Network Imported Fuel
- Network Energy Generation
- Heat Demands and Losses
- Economic Indicators
- Network Outages / Service Interruptions

## E – Funding and Procurement

- Total application budget and funding request
- For capital application forms this is broken down into the different network areas works being applied for
- Procurement i.e. description, procurement milestones

## F – Confirmations

- Supporting Evidence
- Applicant's Declaration



# Supporting evidence

## Capital Grants

- Evidence of application costs
- Evidence of targeted benefits
- A signed letter (or letters) confirming:
  - Applicant support for the application and works to be supported;
  - Match funding;
  - Acceptance of monitoring and reporting requirements;
  - Confirmation (where relevant) of any other subsidies relevant to the project
- A summary programme of works
- Where applicable, confirmation / evidence of eligibility of metering costs relative to HNMBR requirements

## Revenue Grants

- Evidence of application costs
- A signed letter (or letters) confirming:
  - Applicant support for the application and works to be supported;
  - Match funding (if relevant);
  - Acceptance of monitoring and reporting requirements;
  - Confirmation (where relevant) of any other subsidies relevant to the project
- An outline project programme



# HNES with Multiple Projects

1. We **do not** intend to fund multiple applications by a single applicant where projects are considered similar in terms of engineering design/operation, indicators of sub-optimal performance and/or indicators of customer detriment.
2. Applicants should consider the extent to which learning from a smaller number of Optimisation Studies may support, validate or enable similar work in other projects in the applicant's portfolio outside of the HNES budget envelope.



# To submit an application

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

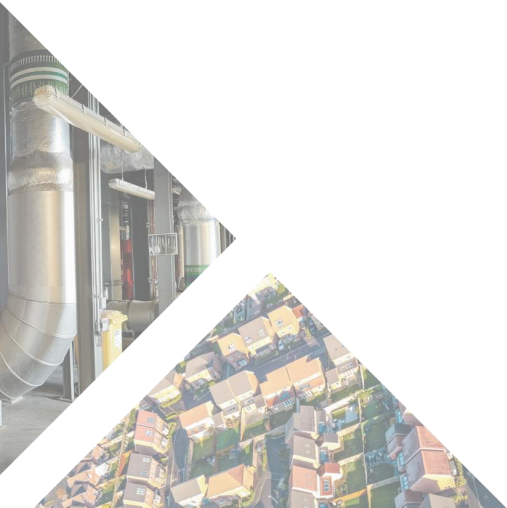
1. Request an application form – current versions are v5.0 for capital and v3.0 for revenue
2. Express interest in applying for future rounds
3. Request a SharePoint space to submit your application for Round 5 – deadline this **Friday 3<sup>rd</sup> November**



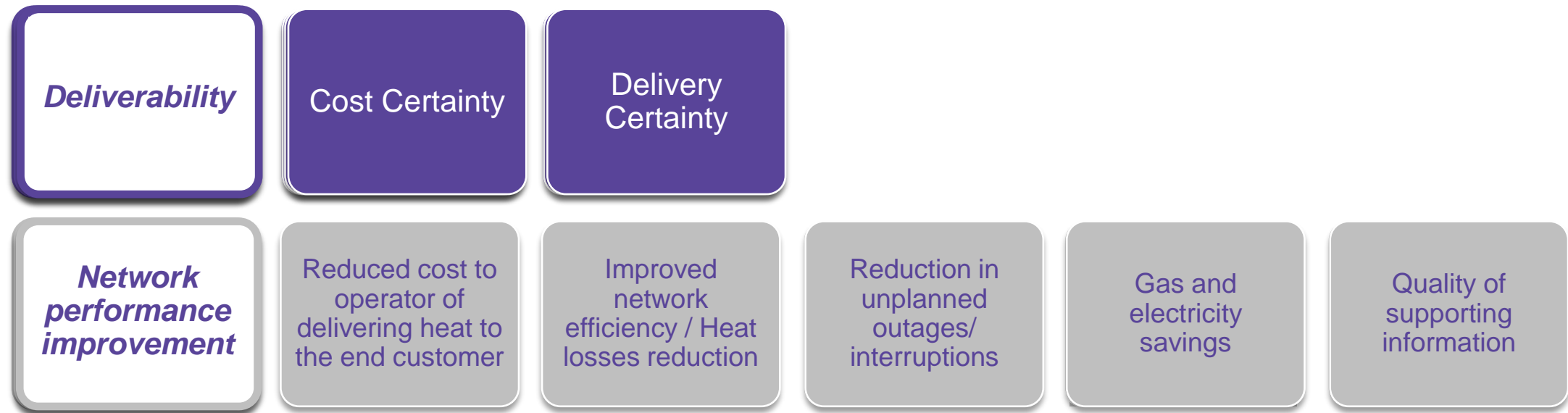


# Assessment Process

Louise Singleton  
HNES Programme Manager



# Scoring criteria (capital applications)

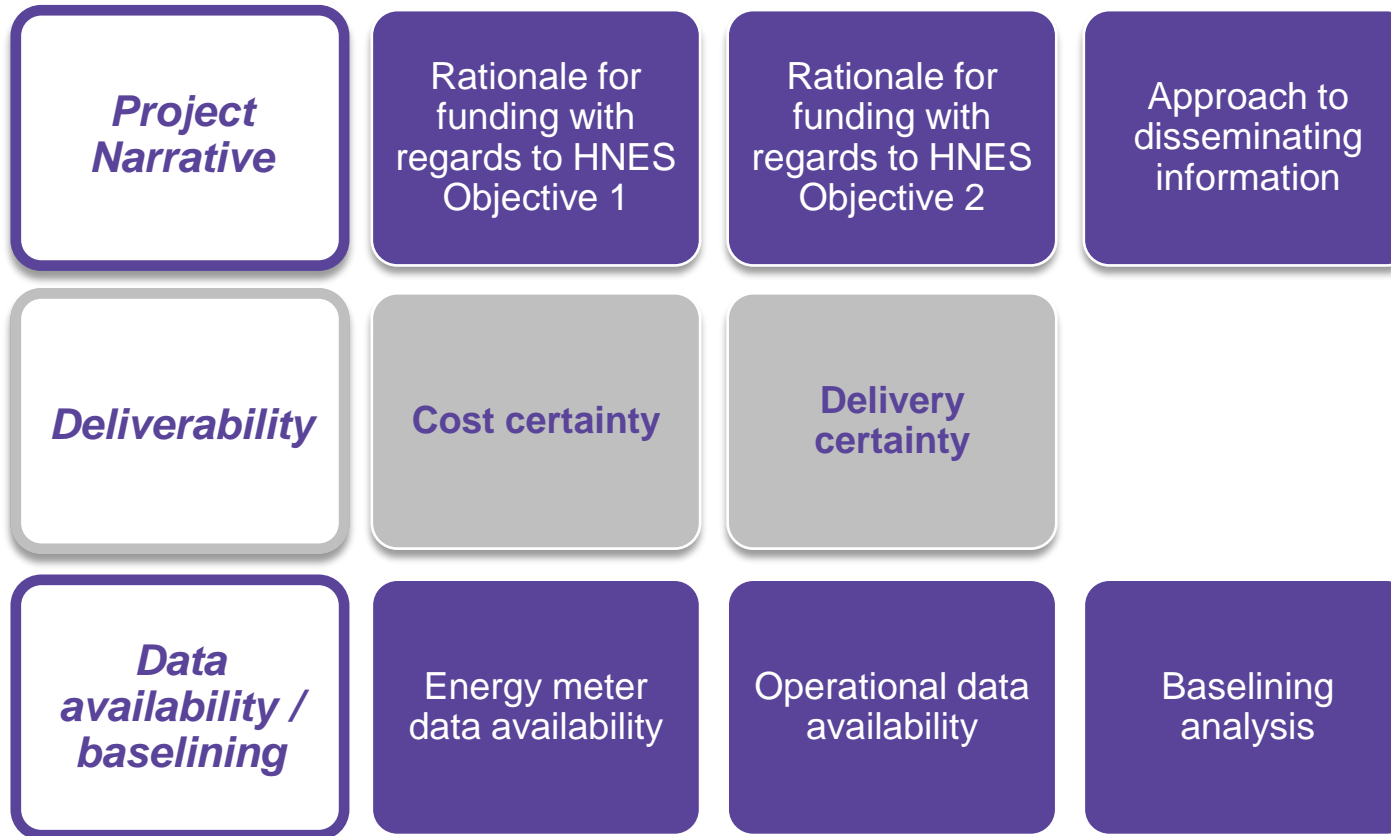


# Scoring criteria (capital applications)

|  |  |  |                                       |
|--|--|--|---------------------------------------|
| <b><i>Project Narrative</i></b>              | Rationale for funding with regards to HNES Objective 1 | Rationale for funding with regards to HNES Objective 2 | Approach to disseminating information |
| <b><i>Value for money</i></b>                | Cost of carbon abated                                  | Cost of gas savings                                    | Cost of electricity savings           |
| <b><i>Data availability / baselining</i></b> | Energy meter data availability                         | Operational data availability                          | Baselining analysis                   |



# Scoring criteria (revenue applications)



# Round 5 Timescales

| Weeks | Description  | Indicative Dates*   |
|-------|--|---------------------|
| 1-6   | Application assessment period, including clarification period.<br>Submission of assessment outcomes to HNES Investment Committee   | 13/11/23 – 22/12/23 |
| 7-9   | Christmas Break  | 27/12/23 – 05/01/24 |
| 9-11  | Review of assessments by HNES Investment Committee (including clarifications) leading to decision on funding award recommendations | 08/01/24 – 26/01/24 |
| 12-13 | Internal approvals of funding recommendations by the Department of Energy Security and Net Zero                                    | 29/01/24 – 09/02/24 |
| 14    | Confirmation to all applicants of successful / unsuccessful applications   | 12/02/24 – 16/02/24 |
| 15    | Issue of Grant Funding Agreements to successful non-Local Authority applicants   | 19/02/24 – 23/02/24 |
| 15-18 | Further approval process for Local Authority applicants and issue of Memorandum of Understanding to successful applicants          | 19/02/24 – 08/03/24 |

\*dates are indicative only and subject to change



# Clarifications

- From an Applicant's perspective, the application is completed when the application form and accompanying supporting evidence are submitted to HNES
- During the assessment period (Weeks 1-6), clarifications may be raised to which the Applicant must respond
- **It is essential that the Applicant is available over this period to ensure full and timely responses to any clarifications can be provided**
- Further clarifications may be raised as part of the Investment Committee process (Weeks 9-11)



# Monitoring and Reporting requirements

- A condition of grant funding is regularly submitting Monitoring and Reporting (M&R) returns
- M&R returns are essential to track whether grant funding will be spent and also to ensure the Aims of HNES are being met
- Additional written guidance on M&R is provided to successful projects.

## Revenue M&R Returns

- Required from grant award until sign off of Optimisation Study
- Monthly returns covering:
  - Project progress updates
  - Risks and issues
  - Budget drawdown
- Final return to include:
  - Optimisation Study Outputs Annex

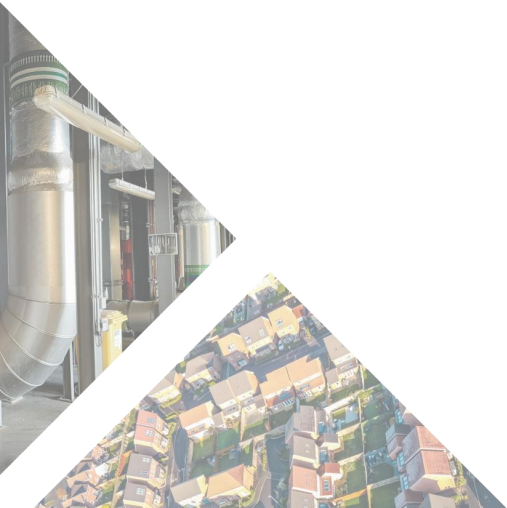
## Capital M&R Returns

- Required from grant award until 24 months after commissioning date
- Monthly returns covering:
  - Project progress updates
  - Risks and issues
  - Budget drawdown
- Quarterly returns covering:
  - Progress against benefits and KPIs for each of the previous 3 months



# Pre-application Support

Christina Thompson-Yates  
Communications Manager



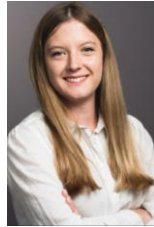


# Where to find help and support

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

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

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



Neil Smillie



Billy Clifflen



Chris Forster



Elin Pain

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



# Pre-application Support

Prospective applicants can access front end support from our Pre-Application Support team to discuss the application process, or to begin their application for submission.

The Pre-Application support team can provide:

- Initial contact and issue of application form
- 1-2-1s with dedicated Relationship Managers to discuss application
- First pass review of application with feedback
- Responding to applicant enquiries prior to submission
- Signposting to applicants that they are ready to submit



# Follow our new social media accounts



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



[@HNEScheme](#)

## Join our mailing list



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





## HEAT NETWORK EFFICIENCY SCHEME



Department for  
Energy Security  
& Net Zero



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RAMBOLL

Turner & Townsend



HEAT NETWORK  
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