

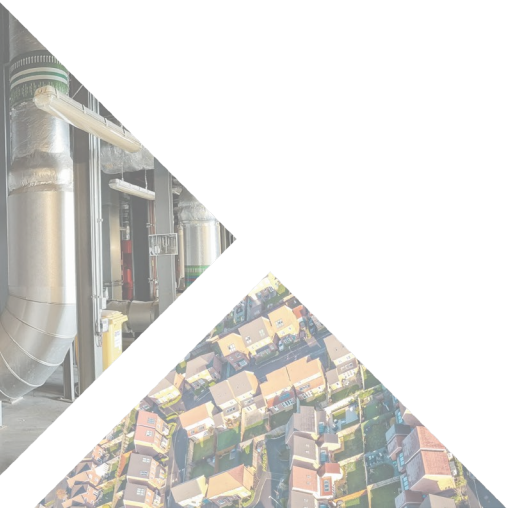


HEAT NETWORK EFFICIENCY SCHEME



Welcome and Agenda

Christina Thompson-Yates



Welcome



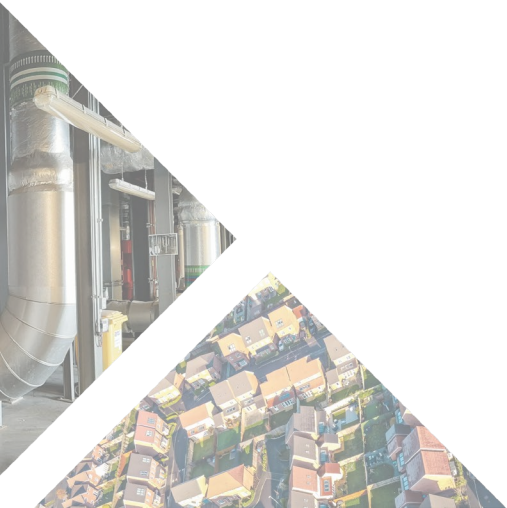
Please mute microphones to limit disruption



If you are not speaking, please turn off webcams to improve video quality

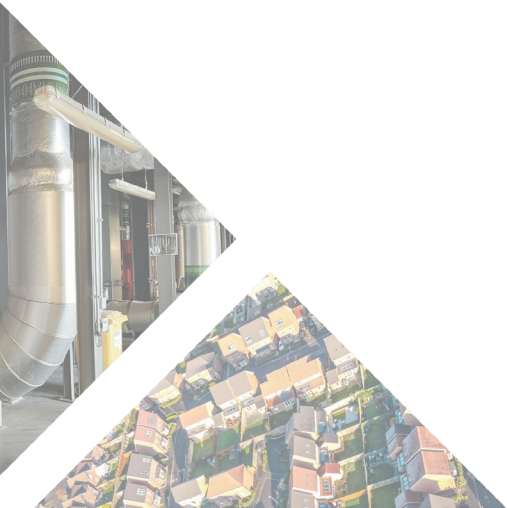


Please ask questions using the Q&A functionality



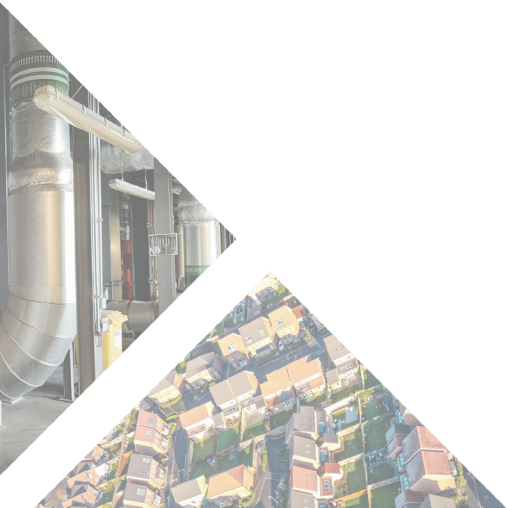
Agenda

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

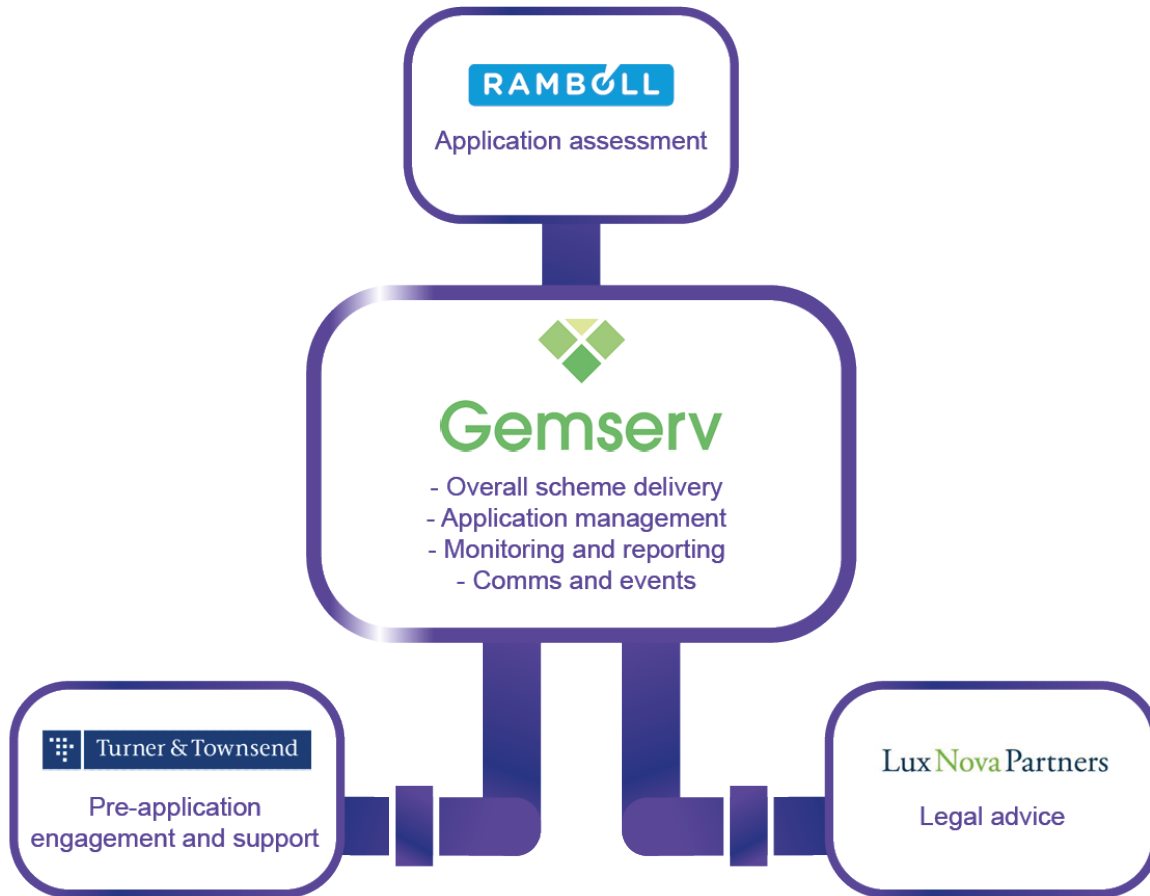


Introduction to HNES

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
- 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 1st 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

Changes to Round 4 & 5

Round	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
Round 4		★	Friday 22 nd September 2023							
Round 5				★	Friday 10 th November 2023					
Round 6							★	Friday 2 nd February 2024		
Round 7							Friday 22 nd March 2024		★	
Round 8								Friday 10 th 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**

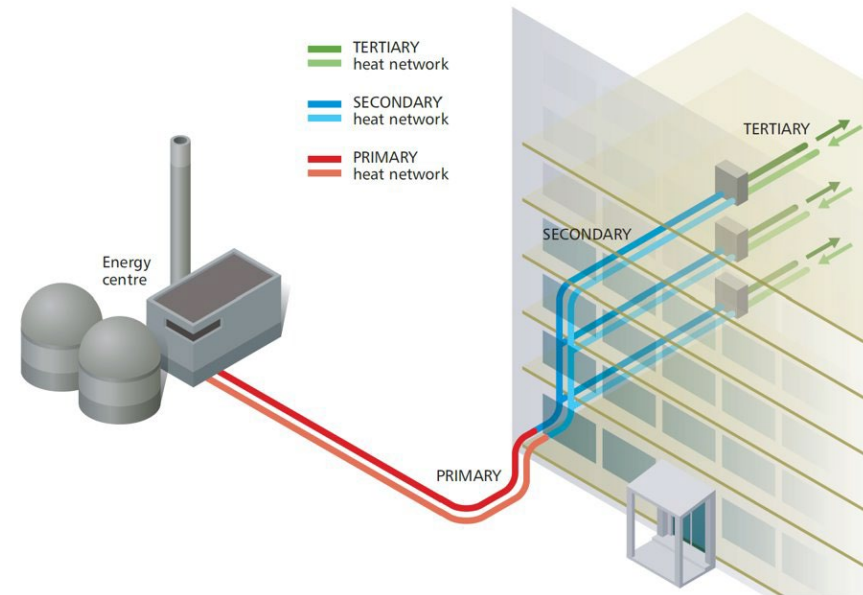
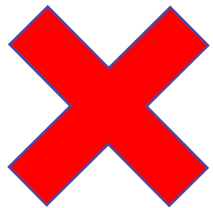


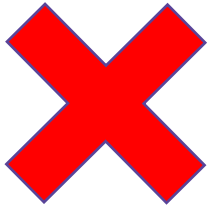
Image: Heat networks CP1: 2020

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



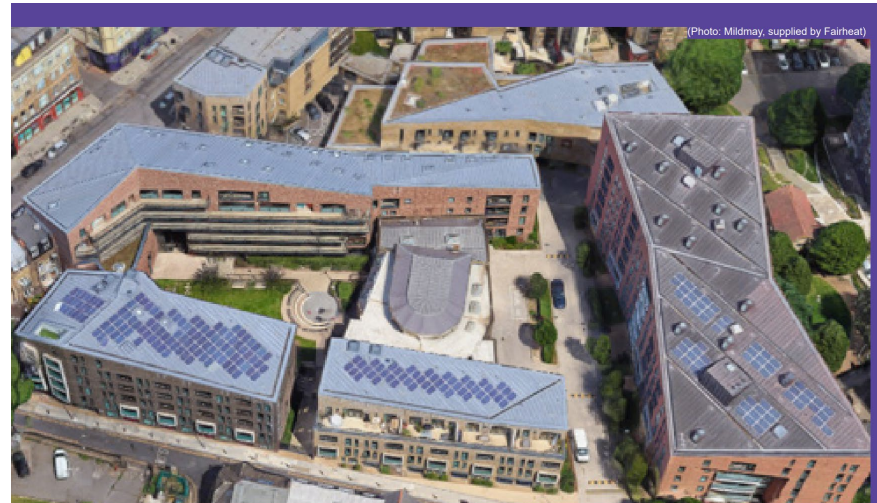
Example HNES Demonstrator projects



(Photo: Daniell house, supplied by Hackney Council)

Case Study - HNES Demonstrator Revenue Project – Hackney Council

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 carbon emissions by 676 tonnes over a 20-year period. Hackney now intends implement the measures identified.



(Photo: Mildmay, supplied by Fairheat)

Case Study - HNES Demonstrator Optimisation Study & Capital Works – Notting Hill Genesis

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.

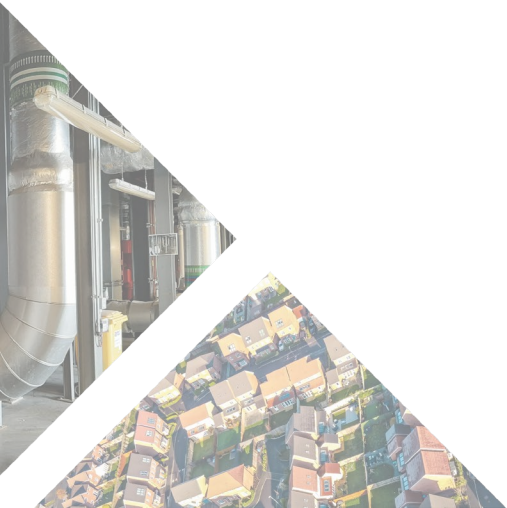
Three main areas for improvement were identified, with poor HIU performance found in 50% of dwellings, alongside poor water quality, a complex hydraulic design, and an inadequate control strategy. Funding provided to the network enabled interventions which resulted in lower flow and return temperatures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



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

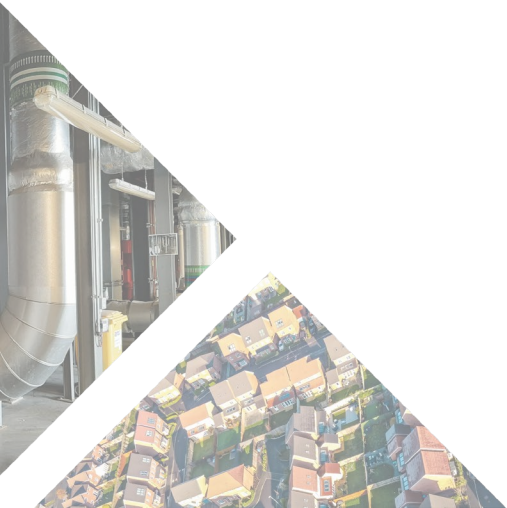
Email hnes@gemserv.com to:

1. Request an application form – current versions are v4.0 for capital and v2.0 for revenue
2. Express interest in applying for future rounds
3. Request a SharePoint space to submit your application for Round 4



Assessment Process

Louise Singleton
HNES Programme Manager

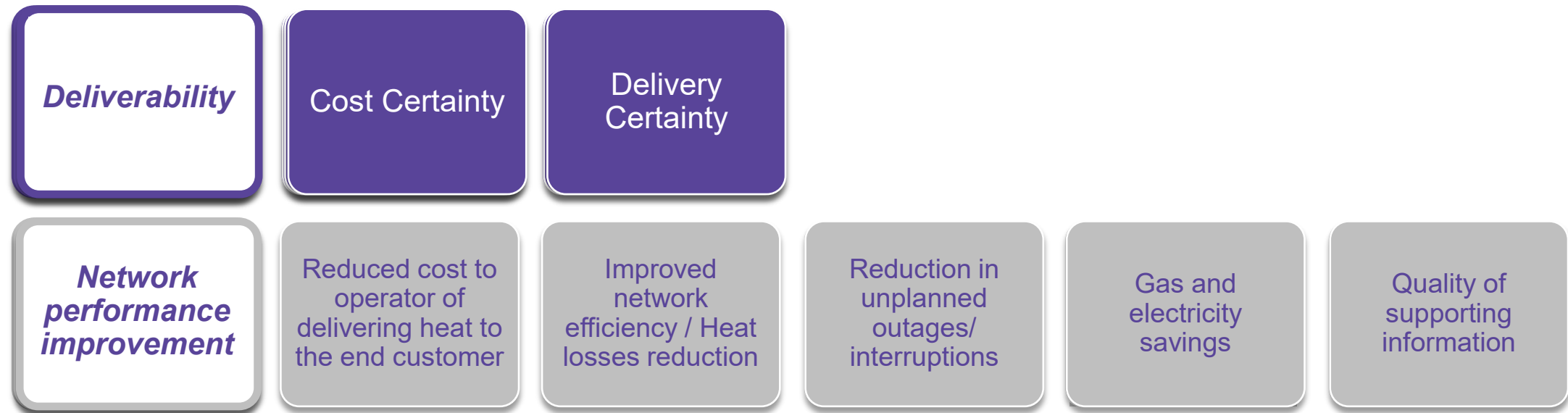


Scoring criteria (capital applications)

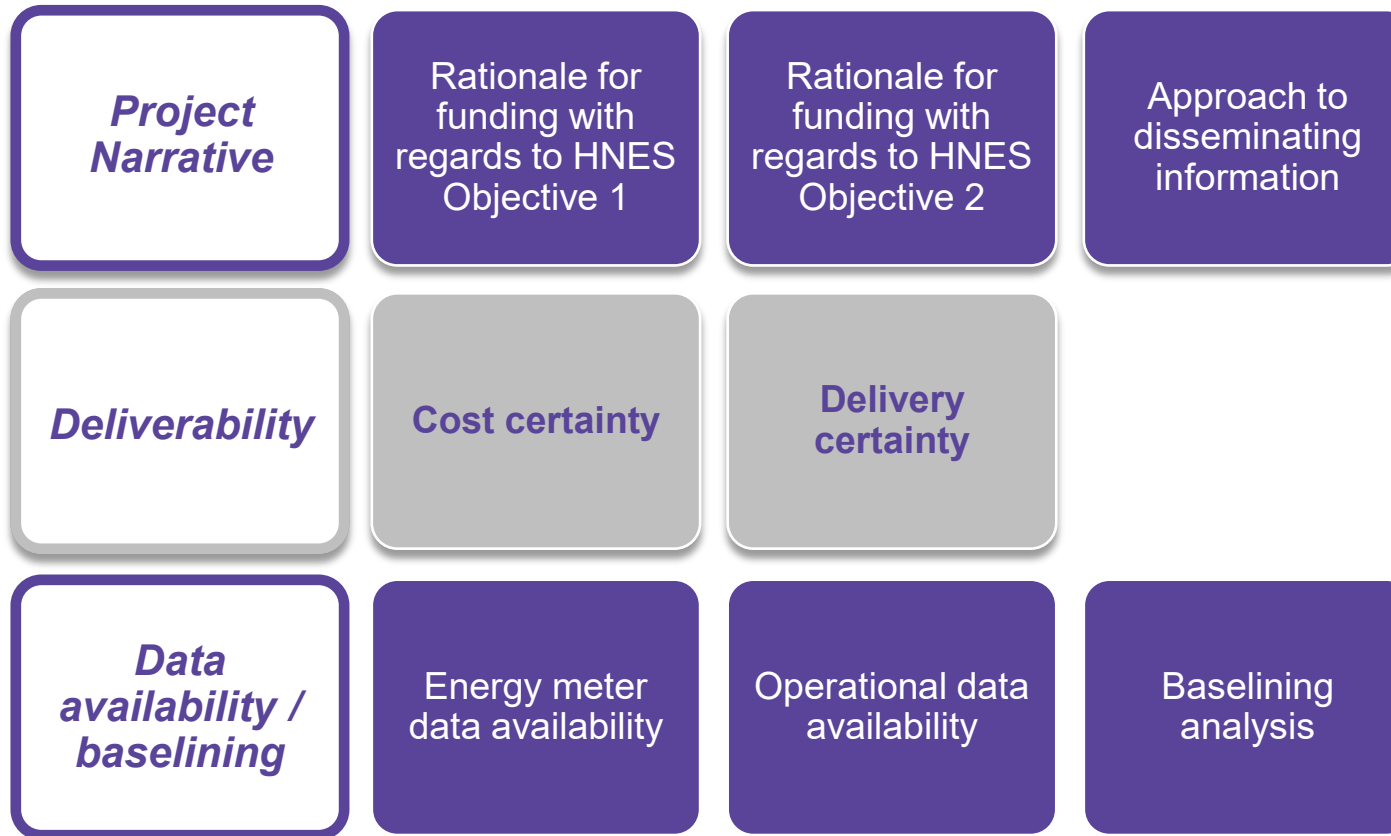
<i>Project Narrative</i>	Rationale for funding with regards to HNES Objective 1	Rationale for funding with regards to HNES Objective 2	Approach to disseminating information
<i>Value for money</i>	Cost of carbon abated	Cost of gas savings	Cost of electricity savings
<i>Data availability / baselining</i>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



Scoring criteria (capital applications)



Scoring criteria (revenue applications)



Timescales from Applicant's perspective

Weeks	Description
1-6	Application assessment period, including clarification period. Submission of assessment outcomes to HNES Investment Committee
7-9	Review of assessments by HNES Investment Committee (including clarifications) leading to decision on funding award recommendations
10	Internal approvals of funding recommendations by the Department of Energy Security and Net Zero
11	Confirmation to all applicants of successful / unsuccessful applications
12	Issue of Grant Funding Agreements to successful non-Local Authority applicants
11-15	Further approval process for Local Authority applicants and issue of Memorandum of Understanding to successful applicants



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



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

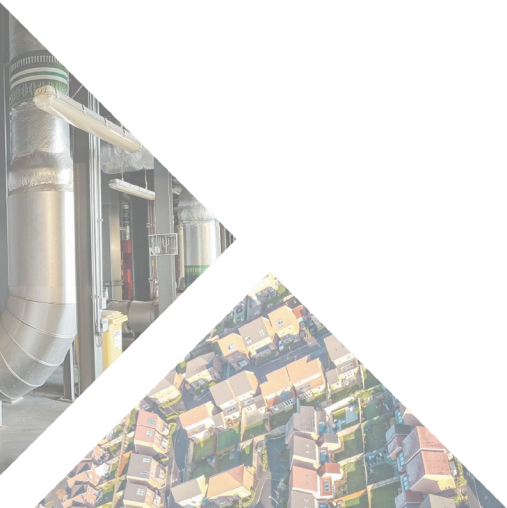
Capital M&R Returns

- 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



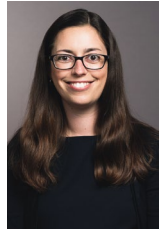
Pre-application Support

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



Louise Singleton



Samantha Shea



Sam Hales



Rosie Knight



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

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



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



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