Date: October 2016

GMCA GREATER MANCHESTER COMBINED AUTHORITY

Subject: Heat Network Investment Project (HNIP) – £320m fund – initial phase (project pilot) details

Author(s): Alex Trebowicz, Julian Packer, Amy Beasley (GMCA Low Carbon PDU)

PURPOSE OF BRIEFING NOTE

Please note that this is a briefing note to provide an overview of the HNIP. Those wishing to pursue applications for funding are advised to read the application documentation.

This paper is to provide an update to a paper written in June 2016 (see Appendix 1), which introduced the Department of Business, Energy and Industrial Strategy (DBEIS) Heat Network Investment Project (HNIP), the £320 million funding for which was announced in the November 2015 Spending Review.

A public consultation on the HNIP was held in summer 2016 to seek industry views on development of the project. The GM LCPDU contributed to the consultation. On 17th October 2016 Government published the consultation response document[1] as well as guidance for the HNIP pilot scheme which aims to commit an initial £39m of funding by March 2017. This guidance includes an outline of the application process with focus on scheme eligibility requirements and how funding will be awarded.

The key dates for the pilot phase programme are:

- Submission of pre-qualification applications by 18th November 2016
- Submission of full applications by 28th November 2016;
- Assessment of applications by DBEIS complete by 13th January 2017;
- Contract agreement / funding commitment Feb/March 2017;
- Capital funding (grant/loan) transferred between April 2017 and March 2018 (scheme dependant)

This paper provides a summary of the scheme, its administration and rules, and requirements for applicants. Further details of the pilot scheme can be found at **http://hnip.salixfinance.co.uk** .

GMCA CONTACT OFFICERS

Julian Packer, Low Carbon Investment Director, j.packer@manchester.gov.uk
Alex Trebowicz, Technical Project Manager, a.trebowicz@manchester.gov.uk
Amy Beasley, Technical Project Manager, a.beasley@manchester.gov.uk

---

[1] https://www.gov.uk/government/consultations/consultation-on-the-heat-networks-investment-project-hnip

HNIP summary

The following summary is included in the HNIP consultation response and provides a broad outline of the scheme design. A full guidance document will be published on 28th October 2016.

- A Pilot Scheme is being launched now for applications this Autumn, with initial payments to be made by 31 March 2017. The budget available for the Pilot Scheme is up to £39m, split across two financial years (2016/17 and 2017/18).
- The Pilot will consist of one single competitive funding round and will inform the design of the Main Scheme, which is expected to open in 2017 and run for four years.
- The Pilot Scheme is open to local authorities and other public sector bodies excluding central Government Departments, noting that there are some restrictions on the type of finance that some public sector organisations can accept.
- Applicants can apply for grants or loans (loans are only where money is to be on-invested in private sector heat networks as loans or equity).
- Any efficient heating and cooling networks are eligible to apply for support, including those that also generate electricity providing they meet technical and customer requirements and are located in in England or Wales.
- Eligible costs include the construction, expansion, refurbishment and interconnection of heat networks, including works to access recoverable heat and upgrade of heating systems inside some existing properties. Commercialisation phase costs are also eligible where they form part of a construction application .
- Multiple criteria will be used to score and rank applications with respect to their carbon savings, customer impact and social net present value.

The scheme is being administered by Salix Finance, with DBEIS undertaking the techno-economic and commercial analysis of applications.

HNIP key issues and considerations

The following information relates to the pilot phase unless otherwise specified.

1. When are the funding rounds?

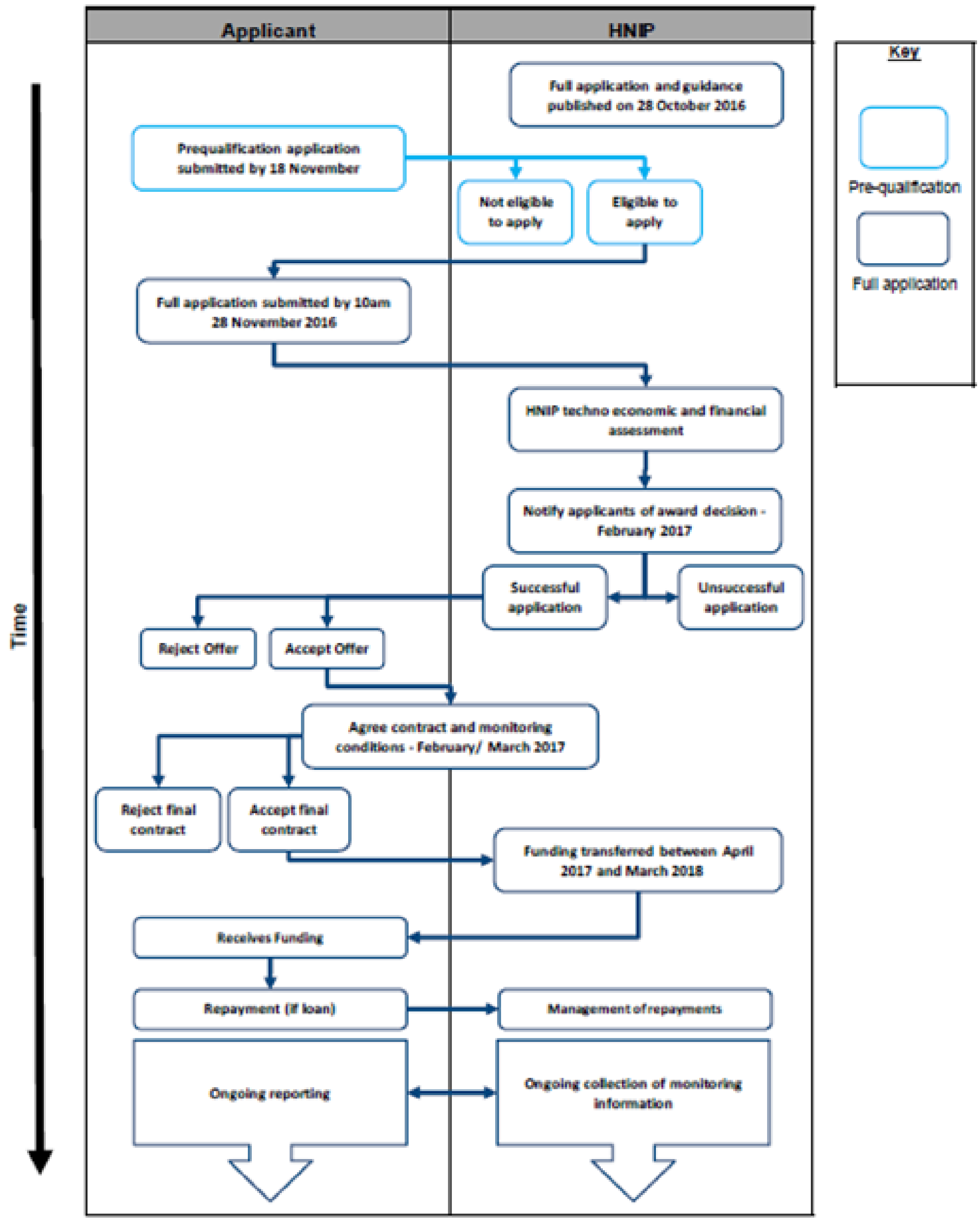
The first phase of the HNIP will be a pilot, with invitation for applications for spend relating to 2016/17 and 2017/18 budgets (spend must have occurred by March 18 and March 19 respectively).

Further funding rounds (up to 2021) are anticipated beyond the pilot phase, subject to ministerial sign-off.

2. What is the application process, and the application requirements?

The HNIP capital funding application will consist of two stages; pre-qualification, and full application. Pre-qualification will consist of an online check to determine eligibility – where eligibility is established, a full application will be required to provide project data and upload of project documentation.

Applications will be scored and ranked in order to determine best value for money in line with HNIP aims. The application process chart[2] is below.



Applications will be required to demonstrate evidence that sufficient exploratory and preparatory work has been carried out to support the

[2] Figure 1, HEAT NETWORKS INVESTMENT PROJECT PILOT, Applicant guidance – pre-qualification applications, October 2016

proposed project. This includes as a minimum heat mapping, energy masterplanning, techno-economic feasibility and detailed project development (as defined by HNDU). An application document checklist is provided in the application guidance.

3. Who can apply?

Public sector organisations in England and Wales – applicants must be either heat network sponsors and/or owners who have a role in the network operation.

4. What are the available funding mechanisms and project commercial structures?

The table[3] below summarises the funding mechanism options. Non-fiscal capital must be invested beyond the public sector boundary through a loan or equity.

Commercial structure of the heat network in which HNIP funds will be invested	HNIP funding mechanism options, to be selected by applicant	How HNIP capital can be on-invested by applicant.	Fiscal / non-fiscal classification
Wholly public sector owned heat network – operated as part of the public entity	Grant Loan	N/A	*Fiscal*
Wholly public sector owned heat network – managed through a separate public sector SPV	Grant Loan	Grant Loan Equity	*Fiscal*
Public sector controlled heat network – controlled by the public sector in partnership with the private sector	Grant Loan	Grant Loan Equity	*Fiscal*
Private sector heat network - public sector HNIP applicant providing funding to a majority or wholly private sector controlled heat network	Grant	Grant	*Fiscal*
	Loan	Loan Equity	Non-fiscal

Within the constraints set out in the table above applicants can choose whether they wish to apply for either a grant or a loan. However, BEIS reserves the right to offer an alternative funding mechanism to successful applicants e.g. where an applicant applies for a grant, a loan may be offered or where an applicant applied for a loan, a grant may be offered in order to maximise the impact of the scheme.

A key consideration where a Local Authority is on-investing HNIP funding, is that the Local Authority will be responsible for ensuring HNIP requirements or

[3] Table 2, HEAT NETWORKS INVESTMENT PROJECT PILOT, Applicant guidance – pre-qualification applications, October 2016

conditions of award are reflected in the heat network delivery contract. This includes granting provision of information and audit rights by the SPV to DBEIS, and is irrespective of whether the award recipient has a controlling interest in the network.

Loans are likely to have the following characteristics:

- Term matches project life (up to maximum 40 year term);
- Interest rate below PWLB;
- Annuity repayment profile, with principal repayments starting post-construction;
- Repayment of loan irrespective of whether project progresses to construction or not.

5. What are the eligibility requirements?

The following conditions must be met in order to apply for HNIP capital.

- Projects located in England or Wales
- Heat network providing heating and/or cooling and electricity (excluding communal heating i.e. heating within a single building)
- No technical/commercial barrier to expansion
- Compliance with the Heat Networks (Metering and Billing) Regulations 2014
- The network heat source must be one of:
    - 75% of heat from non-renewable CHP (operating as 'good quality' CHP as defined by CHPQA accreditation)
    - 50% of heat from a renewable source
    - 50% recovered heat
    - 50% of heat from any combination of the above

  [The above percentages apply to the heat generated by the network over the lifetime of the initial primary heat source]
    - Confirmation that preparatory work has been carried out in accordance with the CIBSE Heat Network Code of Practice (CP1)
    - Commitment to becoming a member of the Heat Trust (where applicable)

6. What are the funding requirements?

HNIP can only contribute a proportion of the total funding requirement – applications will, therefore, be required to demonstrate from where any remaining funding has been sourced. The scheme overview documents details the tests which can be applied to determine how much HNIP funding can be applied for. Broadly speaking, these are broken down into two options:

- **New heat networks** – demonstrating the capital contribution required to take the IRR without HNIP funding up to the hurdle rate of the equity investor.

- **Existing networks, and networks initiated through planning** – demonstrating the capital contribution required (specifically for incorporating additional future-proofing or best practice measures that deliver benefits specific to HNIP targeted benefits) to take the IRR without HNIP funding up to the hurdle rate of the equity investor. For these networks a pre-approved list of technical and commercial features is provided in the guidance, although applicants are able to make a case for features not listed.

In both cases, two versions of a cash-flow or financial model (with and without HNIP support) are required to be submitted as evidence, along with evidence that demonstrates that the hurdle rate of the equity investor cannot be met, and why the project cannot access any/sufficient non-HNIP debt funding.

For each application received, DBEIS will run a shadow financial model (based on application input template) to test the commercial performance of the proposed network. The shadow model will test whether the real pre-tax equity IRR does not exceed a (unpublished) ceiling set by HNIP.

7. What are eligible costs?

Eligible costs are:

- Commercialisation costs, where included as part of a construction application
- Design, construction and commissioning of: primary network and energy centre; secondary distribution systems (existing buildings/networks only); tertiary heating and hot water systems (where meeting specific HNIP conditions).

8. What are state aid considerations?

Government intends to notify aid provided from the HNIP under Article 46 of the General Block Exemption for State Aid (GBER), 'Investment aid for energy efficient district heating and cooling'. Local Authorities in receipt of HNIP funding will be required (as a condition of funding award) to demonstrate how it will put HNIP funding (plus any other additional capital) into the market in a compliant way. The aid intensity can be increased in assisted areas[4], which include several areas within GM.

Applicants can combine funding from HNIP with other Government or EU funding schemes if there is still a funding gap and this is allowable under relevant scheme rules and compliant under State Aid obligations (for example: the Renewable Heat Incentive (RHI), Energy Company Obligation (ECO), Contract for Difference (CfD), the Renewables Obligation (RO), Community Infrastructure Levy (CIL), section 106, Local Growth Funds, EU Horizon 2020, EU European Regional Development Fund (ERDF), European Energy Efficiency Funds (EEEF), etc).

[4] http://www.ukassistedareasmap.com/ieindex.html

9. How will applications be assessed/scored?

Pre-qualification stage assessment will involve completion of a self-declaration form online, covering:

- Organisational eligibility
- Heat network eligibility
- Meeting technical and customer requirements
- Investment cost eligibility
- Demonstration of carbon savings, and heat price relative to the counterfactual
- Evidence of a funding gap

A full list of questions at this stage is provided in the guidance document appendix.

Full application stage assessment and scoring based on submitted project information (as described below). Scoring criteria will include:

- Short term carbon savings
- Long term carbon savings
- Heat price (domestic and non-domestic customers)
- Quality of service
- Social net present value (NPV)

The submitted project information to be submitted includes as a minimum:

- Approved business case
- Technical heat network design documentation
- Cash-flow or financial model
- Heads of terms with anchor loads and other critical revenue sources

10. What are the next steps if the application is successful?

Information submitted at full application stage, where commercialisation has not been completed, will need to be updated post-commercialisation before release of construction funds. This will include a declaration of whether any information from the original application has materially changed

The key steps between award approval and release of capital funds is described in the table[5] below.

[5] Table 5, HEAT NETWORKS INVESTMENT PROJECT PILOT, Applicant guidance – pre-qualification applications, October 2016

Step	Description and follow up	Timings
1. Awards panel approval received	An awards panel will make decisions on funding based on the assessment carried out by the BEIS assessment team	Three weeks
2. Applicants will be issued a notification letter and funding agreement.	Applicant will not be able to deviate or re-negotiate the terms of the agreement.	
3. Conditions compliance	Evidence of compliance with conditions must be provided be funding agreement can be signed by both parties	
4. Sign funding agreement	Once the signed agreement is received, a grant/loan form and determination form will be sent to the applicant.	Applicant has two weeks to sign and return the funding agreement from the date of the issue notification letter.
5. The applicant will need to sign and submit the claim form to request the funding. For specified applicants, this may also include the submission of evidence of on-investment to the private sector.	The submitted claim form and evidence of on investment will be reviewed by SALIX and BEIS.	Applicants have two weeks to return documents from the date on the claim form.
6. Funding paid to applicant.		By March 2017 for first payments

APPENDIX 1 – HNIP Consultation paper, June 2016

GMCA GREATER MANCHESTER COMBINED AUTHORITY

HEAT NETWORK INVESTMENT PROJECT

This paper provides an overview of the authors understanding of the HNIP project based on engagement events by, and discussions with, the Department for Business, Energy and Industrial Strategy (DBEIS). The final scheme details are yet to be established/finalised, and will be confirmed by DBEIS in Autumn 2016.

HNIP principles

The stated aims of the HNIP are split into short-term and long term:

Short-term:

- Increase the volume of heat networks by providing seed money that will draw significant additional investment;
- Deliver carbon savings for carbon budgets 4 and 5 (spanning the years 2023 and 2032);
- Empower public sector actors to meet local needs, through heat network projects that would not have been possible without government support, i.e. those that:
    - Have explored a suitable range of technical options, and are future-proofed;
    - Are commercially future-proofed;
    - Operate with no customer detriment in comparison to fossil fuel based heat.

Long term:

- Contribute toward and develop a self-sustaining district heating market, meaning one that can prosper without subsidy.

DECC has identified 3 classes of projects (noting that the IRR ranges shown below reflect DECC's current thinking and the definition and ranges are still to be confirmed) :-

- "sub economic" with a project equity IRR of less than 5%
- "economic" with a project equity IRR between 5% and 12%
- "commercial" with a project equity IRR greater than 12%

A key driver for DECC is the principle of "Additionality". What this means in practice is supporting projects with merit which would not go ahead without the DECC funding.

Another key principle is that the funding has to be split evenly between "fiscal" and "non fiscal" spending. In practice "non fiscal" spending is funding going to projects involving the private sector.

For the first funding Tranche (which DECC is treating as a pilot) applicants may be owners of a network or sponsors of one. DECC is limiting funding to public sector applicants in Tranche 1 (however, the private sector can still partner with or be sponsored by public sector applicants and benefit from funding); there will only be a second Tranche (with private sector applicants directly able to apply) if sufficient public sector applications fail to emerge in Tranche 1.

Tranche 1:
- Local Authority led/sponsored projects, including wider public sector (Education, Health);

Tranche 2 (assuming Tranche 1 projects do not cover the £320m):
- Private sector projects, including community schemes.

From a state aid perspective the HNIP will be run under a general block exemption, where pipe-work infrastructure and heat generation assets are considered separately.

The £320m will be split into annual (financial year) pots with 3-4 rounds per year from 2017/18, with no carry over likely from year to year. The spend profile defined by Treasury is back-loaded, given that it is anticipated not many projects will be ready to apply for the first Tranche.

Timing

Because of the EU referendum and multiple purdah periods this year, there is currently a large backlog of Government proposals awaiting action. However the launch of the first Tranche will be in Autumn 2016, with funding from this fiscal year, which could be available by March 2017. DECC's target is to disburse £50m in this financial year

Application procedure

DECC has suggested that the application process will enable prioritisation of projects while minimising the burden on applicants. At this stage proposals include:

- Each competitive funding round will consist of three stages.
    - Stage one: the application form is submitted and there is an eligibility assessment.
    - Stage two: DECC performs a techno-economic assessment; initial decisions are made with specific conditions.
    - Stage three: Due diligence is performed; conditions are assessed and a final decision is made.
- The next step is a contractual agreement, the release of funds, state aid notification and ongoing applicant support.

A positive decision regarding the funding can be made before the final business case and/or commercial structure is agreed / approved, i.e. to feed into the commercialisation stage.

Funding mechanisms

DECC is seeking views from the public and private sectors on the type of funding mechanisms that will prove most beneficial achieving the aims of the HNIP, the following are currently under consideration:-

1. Soft loans (possibly including low interest rates, repayments after construction, payment holidays, subordinated debt etc);
2. Grants;
3. Public sector equity stake (e.g. from the relevant local authority);
4. Heat guarantees – although the current thinking is that the drawdown profile of a loan could be linked to development phases rather than provide a "guarantee"

The disbursement of funds will not extend beyond 2020/21 however loan terms will extend beyond that date

Eligibility

Beyond the eligibility of applicants for Tranche 1 (and possibly Tranche 2), new heat networks, expansions, refurbishments, interconnections, cooling networks, and heat networks that generate electricity are all considered eligible. DECC has embraced a relatively broad definition of eligibility, but projects must be 'future-proofed' so that they don't pass on high costs to consumers. Additional eligibility requirements include:

- If a heat network intends to use waste heat, one thing the HNIP funding will not cover is new sources of waste heat, such as new factories or waste incineration plants. The heat source must already exist.
- A heat network must connect two or more buildings, and there must be no explicit impediment to future expansion or interconnection.
- The network must use at least 50% renewable energy, 50% recovered heat, 75% CHP, or a combination of the above which gives 50% contribution – this is likely to be defined as percentage of delivered energy.
- In addition there must be:
  - A reduction in primary energy versus the counterfactual from fossil fuels,
  - The network must comply with the heat metering and billing regulations
  - The generation plant (assuming use of CHP) must operate as 'good quality' as defined by the CHPQA.
- Other criteria under consideration:-
  - Compliance with Code of Practice CP1
  - Membership of the Heat Trust (currently only relates to domestic heat connections)

Scoring criteria

DECC officials have not decided on a selection procedure but may employ an expert panel or auction to choose winners.

- Scoring criteria will closely scrutinise project additionality, or the extent to which new carbon savings are achieved that would not have occurred without Government support. Two pots of capital are likely with regards to additionality:
    - One pot will support projects that would not have been possible without support.
    - Another pot will support projects that are already commercially viable but will be able to achieve additional characteristics with Government support.