ICMD

Progressing Lancaster District Heat Network: Heat Network Zoning Prospectus Grant Funding Proposal

Report of Chief Officer Sustainable Growth

PURPOSE OF REPORT					
To agree to the city council becoming the accountable body for a Heat Network Delivery Unit Round 15 Grant Funding Programme grant application - administered by the Department for Energy Security and Net Zero - for up to £65,000.					
Key Decision		**Non-Key Decision**	**X**	**Referral from Cabinet Member**	
Date of notice of forthcoming key decision					
This report is public					

RECOMMENDATIONS OF Chief Officer Sustainable Growth

(1) Lancaster City Council undertakes the role as the accountable body for a full HNDU15 grant application up to £65,000.

(2) Acceptance of grant award under the HNDU scheme for this work is delegated to the Head of Sustainable Growth.

(3) Officers appoint the consultant as described in the report in accordance with the city council's procurement rules and protocols, and the HNDU15 grant award criteria.

(4) Officers of the city council administer the contract and funding for work in consultation with DESNEZ, North West Net-Zero Hub and other local partners.

(5) A report to Cabinet is made in 2026 on next steps in progressing heat networks locally and defining the city council's role, resource requirements and management of risks as informed by the consultant's work.

1.0 Introduction

1.1 Since 2019 the city council has undertaken work to explore the opportunities for development and delivery of heat network clusters across Lancaster District**.** Heat networks - also known as district heating and cooling systems - use underground pipes to deliver hot/cold water or thermal energy from a central source to buildings. These systems can supply both heating and cooling and are often powered by low-carbon technologies such as heat pumps, solar, biomass, or waste heat from industrial sites or waste water plants.

1.2 The UK Government sees heat networks as key to achieving net-zero, reducing carbon emissions, tackling fuel poverty, and balancing electrical demand. Currently, many UK networks are small-scale and managed by a single organisation, like a council or housing association. Buildings connected to a heat network don't need individual boilers, which can reduce maintenance. Networks can expand over time with multiple energy centres, improving resilience. Modern systems can transfer heat up to 30km and may also carry electricity or data. In places like Copenhagen, over 95% of buildings are connected to locally based networks.

1.3 One of the ways the government is seeking to support the roll out of heat networks is via Heat Net Work Zoning. Heat Network Zones are geographic zones where heat networks offer the most cost-effective route to decarbonising heat, this approach will equip local communities to accelerate network development and expand access to greener, more affordable heating for homes and businesses.

1.4 Lancaster was one of 28 English cities and towns which were Heat Network Zoning pilot cities. This pilot project refined and tested heat network zoning methodology. The findings from the pilot are being used to finalise the model for identifying potential heat network zones. The Energy Act 2023 provided the powers for government to implement heat network zoning in England. The UK Government's Heat Networks (Market Framework) (Great Britain) Regulations 2025 introduces the framework for zoning and further regulation for heat networks to support low-carbon heating. Ofgem is now the sector regulator, enforcing fair pricing, technical standards, and consumer protections. Crucially, local authorities are regarded as central to delivery. They may be designated as Zone Coordinators - responsible for identifying heat network zones, coordinating infrastructure, approving proposals, and updating Local Development Schemes to reflect zoning. This planning role is vital to unlock investment, streamline delivery, and meet net-zero targets.

1.5 Failure to engage poses risks: authorities may miss out on funding and infrastructure, fall foul of regulatory obligations, and increase pressure on the electricity grid. Communities could lose access to affordable, low-carbon heating, undermining both environmental and social goals. Proactive planning is essential to avoid falling behind and to ensure local benefits are realised.

1.6 In recent years, the city council has made several studies and policy resolutions on heat networks (refer to **Background Papers and Relationship to Policy Framework**). Reports show how zoning can be applied in practice, identifying potential heat network zones across the district

and describing how zoning could accelerate decarbonisation, reduce energy costs, and support local planning ambitions.

1.7 Heat Network pilot authorities across England are now progressing through early procurement stages for heat network delivery, with most now entering or preparing for engaging delivery partners through tender processes. Councils like Sunderland, Plymouth and Leeds are issuing draft procurement packs and connection agreements, targeting efficient yet robust selection of Energy Service Companies (ESCOs) capable of delivering full lifecycle projects.

1.8 The Department for Energy Security and Net Zero (DESNZ) is supporting this through the Advanced Zoning Programme and Heat Networks Delivery Unit (HNDU), offering funding and guidance. Essentially local authorities engaged in looking at are refining zoning methodologies and updating feasibility studies, but further delays or lack of engagement risk missing investment, breaching regulatory timelines, and undermining net-zero targets. Lancaster District remains part of the national pilot programme and can move forward with elements to support the practical delivery and setting up to consider the processes and resources required for engaging a commercial private sector delivery partner / provider.

1.9 An opportunity has arisen via HNDU's recently opened Round 15 funding offer to fund and undertake further work to understand and progress heat networks at the city council level. It is intended to update existing models and assumptions and explore governance, procurement, and funding options suitable for each zone. This will include analysis of the relevant public-private relationship or partnership structures, initial anchor load consultation, and phasing. This information should enable officers to advise Cabinet on the implications for the procurement of a commercial delivery partner, options and resource matters, enabling decisions to be made on progressing delivery.

2.0 Background

2.1 Lancaster City Council has undertaken extensive work to support heat network development across the district. This includes heat mapping, feasibility studies, zoning assessments, and decarbonisation projects refer to **Background Papers and Relationship to Policy Framework**). Initial heat mapping and masterplanning in 2019 identified strategic zones in Lancaster City Centre, Morecambe, and Lancaster South. These areas were later refined through detailed techno-economic modelling and stakeholder engagement, forming the basis of a Heat Network Zone Opportunity Report

2.2 Three strategic zones were identified, with Lancaster City Centre emerging as a priority due to its high heat demand density and anchor loads such as the Royal Lancaster Infirmary and Standfast & Barracks. The council has also delivered practical decarbonisation projects, including the refurbishment of Salt Ayre Leisure Centre with low-carbon heating and solar infrastructure. Other sites like Williamson Park and CityLab have been upgraded through Public Sector Decarbonisation Scheme and are heat network ready.

2.3 Existing operational networks include those at Lancaster University, the University of Cumbria, and the Royal Lancaster Infirmary. The University

network is being expanded with support from the Green Heat Network Fund and will be powered by a solar farm and wind turbine. The Canal Quarter regeneration is a key opportunity, with potential to accommodate a central energy centre, based on ground sourced heat pumps delivering for 50GWh/year of heat demand.

2.4 These efforts demonstrate Lancaster's readiness for heat network zoning and delivery. The council has aligned its technical studies, infrastructure upgrades, and strategic planning to support low-carbon heat deployment. However, further work is needed to refine routing, secure delivery partners, and integrate zoning policy as national frameworks evolve.

3.0 Proposal Details

3.1 The HNDU Funding Round 15 Guidance outlines the UK Government's latest support scheme for developing heat networks, targeting local authorities and other eligible bodies in England and Wales. The funding is designed to help applicants prepare for heat network zoning legislation and supports early-stage project development. The scheme prioritises projects aligned with future zoning areas and those demonstrating strategic importance, carbon savings, and local commitment.

3.2 Up to £100,000 per project would be available for eligible external costs, feasibility studies, delivery model assessments, and limited project management support. No match funding is required, but additional contributions are allowed.

3.3 There are 2 stages outlined in the Round 15 guidance

- *Stage 1: Expression of Interest (EOI):* Applicants must have submitted a short EOI between 11 August and 12 September 2025. This includes basic project details, rationale for funding, previous work, stakeholders, and proposed costs. EOIs are assessed periodically, and selected projects are invited to proceed to Stage 2.

- *Stage 2: Detailed Assessment:* Runs from 15 September to 20 October 2025. Applicants provide further evidence and may engage directly with DESNZ. Projects are then categorised as: (i) Prioritised for immediate funding (ii) Prioritised for future funding (subject to availability) (iii) Not prioritised at this time

3.4 Due to time constraints officers have already submitted an EOI which does not commit the council to any further engagement. In consultation with the NWNZ Hub, officers were advised to pitch an application below the maximum eligible cost threshold due to the potential for the fund to be oversubscribed.

3.5 Subject to Cabinet Member approval and a successful EOI stage officers will engage with DESNEZ on forming a more detailed proposal for up to £65,0000 concentrating on developing a Heat Network Zoning Prospectus for Lancaster City Centre and Central Morecambe - two zones identified as strategically significant in the Heat Network Zoning Opportunity Report. Both zones are undergoing major regeneration, making them ideal candidates for heat

network deployment.

3.6 The project will update existing feasibility studies and further align them with the emerging national heat network zoning delivery models currently being implemented through the Advanced Pilot Authorities.

3.7 The scope of the project includes updating the existing Techno-Economic Models (TEMs) for each zone. These updates will incorporate revised assumptions around heat demand, energy pricing, carbon factors, and infrastructure costs. A review of waste heat source options—such as industrial heat recovery and water-source heat pumps—will also be conducted. These updates will reflect current market conditions, development plans, and stakeholder priorities, ensuring the models are robust and compliant with future zoning legislation.

3.8 Delivery model assessments will explore governance, procurement, and funding options tailored to each zone. This includes evaluating public-private partnership structures, anchor load engagement strategies, and phasing plans that align with regeneration timelines. The aim is to identify viable commercialisation pathways and investment opportunities that support long-term heat network delivery.

3.9 Stakeholder engagement is a core part of the project. Key stakeholders include Lancaster City Council (a major property owner in both zones), Eden Project Morecambe, Canal Quarter developers, the local NHS Trust, University of Cumbria, housing providers, and commercial and industrial actors. Their input will inform both the technical modelling and the delivery strategy, ensuring local buy-in and alignment with planning and investment cycles.

3.10 The final output will be a comprehensive zoning market prospectus for Lancaster District. It will include:

- A review of waste heat sources
- Updated TEMs and scenario modelling
- Spatial mapping of priority connections
- Delivery model options and recommendations
- Commercialisation and investment potential
- Infrastructure and phasing plans
- Strategic alignment with zoning legislation
- Stakeholder engagement outcomes
- Evidence of local support for next-stage delivery

The prospectus will position Lancaster City Centre and Central Morecambe as exemplar zones for heat network deployment, supporting net zero goals, low-cost heat delivery, and readiness for formal zoning designation.

3.11 Overall, the Heat Network Zoning Prospectus will provide a strategic, evidence-based framework for delivering low-carbon heat infrastructure in

Lancaster, unlocking investment and ensuring long-term energy resilience.

3.12 The city council would be the applicant and accountable body for the grant awarded should the application be successful. Successful projects will need to be delivered via DESNZ's consultant framework, with studies expected to complete in 2026. The city council will be responsible for tendering for consultants to undertake the work, alongside contract and grant administration, and final reporting. It is understood that grant is payable on claims made in arears, supported by appropriate evidence of expenditure.

3.13 The work will be delivered by the council's Sustainable Growth Regeneration, Climate Policy and Energy & Sustainability teams. The proposal therefore involves the council in procuring and delivering consultant studies with all the usual procurement and contract administration risks. However, officers are experienced in study delivery in this area and will be assisted by the North-West Net Zero Hub, Lancashire County Council and local stakeholders in defining and specifying the use of grant resource offered and securing spend on eligible activities within the general and specific conditions of the administration of public funds (refer to **Resource, Legal and Financial Implications**).

3.14 It should be noted that the city council's role in a future heat network roll out will be pivotal: it will be responsible for leading procurement, engaging stakeholders, and overseeing delivery, with the potential option to act as Zone Coordinator under future statutory arrangements. More advanced pilot areas are currently engaging in procurement to secure a development partner capable of delivering, operating, and maintaining the heat network at scale.

3.15 Reviewing progress at this stage there are several preferred routes to delivery ranging from low commercial risk/low control over outcomes to a higher degree of involvement in commercial risk/higher control as follows:

- **Direct Partner procurement:** council sets out a framework to buy the service and issues documentation - minimal control.
- **Development Agreement:** council partners early - moderate control.
- **Joint Venture Golden Share:** new vehicle - higher control but low risk share.
- **Other Public Private Partnership**: new vehicle – maximum input and control with shared investment risk

3.16 A popular emerging route amongst pilot councils is to procure a partner for a company joint venture (JV) in a heat network project which would then act as the main delivery vehicle for the scheme. The JV is jointly owned by the council (holding a "Golden Share" for strategic control) and a private sector partner (who provides most of the funding and operational expertise). This approach appears to maximise local benefits - jobs, skills, carbon savings, and fuel poverty alleviation - while ensuring alignment with council objectives, national policy and lowering any commercial risk to the council.

3.17 However, any future procurement proposal arising from the proposed consultancy work will consider all relevant options designed to attract private

investment, leverage government capital infrastructure grant funding (notably the Green Heat Network Fund), and ensure rapid deployment once zoning legislation is enacted while limiting council resource exposure in all forms. But the initial principle for this future work is that the council will not be expected to make any direct capital financial commitment. Its role will likely be limited to revenue costs for procurement, communications, legal advice, and strategic planning which will be covered by grant aid.

3.18 The full financial implications and resource requirements for procurement and management, as well as routes to financing such costs will be addressed in a further report to Cabinet in early 2026 informed by the funded work (refer to **Legal Implications and Financial Implications**) .

4.0 Consultation

4.1 Lancaster City Council's policy framework strongly supports the delivery of local heat networks as part of its climate emergency response which has been the subject of wide and extensive consultation.

4.2 Following its 2019 climate emergency declaration, the council adopted a partial review of its Local Plan in January 2025 to embed climate resilience and decarbonisation into planning decisions which has a specific focus on heat networks in both strategic and development management policy.

4.3 Heat networks play a role in decarbonisation of heat in the district which is outlined in the Lancaster District Local Area Energy Plan which was developed with a range of public, private and third sector stakeholders and partners including the electric and gas district network operators for the district.

5.0 Options and Options Analysis (including risk assessment)

5.1 A summary of the options and analysis is presented below:

	Option 1: The city council applies for up to £65,000 grant funding as the Accountable Body and undertakes to procure and deliver work into the practicality of heat network delivery and roll out.	**Option 2:** The city council declines the opportunity to bid for grant.
Advantages	Allows the city council and strategic partners/stakeholders to consider whether the proposal has delivery and investment potential and provides information for the city council's consideration around further engagement. Allows for a better understanding of the legal and financial cost	No application of officer resource and contract administration risks associated with the delivery of a feasibility study financed through external grant.

	implications of the proposition and potential delivery options. Best potential to make heat networks a reality in the district. Has potential to significantly contribute to the city council's and other strategic authorities medium and long-term Net Zero objectives. Has the potential to deliver low cost heat to residents and businesses and support a just and equitable net zero transition . Understanding options and defining a route to practical investment and implementation will be more attractive to strategic external grant funders and investors. Allows exploration of wider demand interest to explore 'best fit' with wider public policy objectives.	
Disadvantages	Officer resource applied as applicant and accountable body for any grant award should the application be successful. The city council will be responsible for contracting consultants to undertake the work, alongside contract and grant administration, and final reporting.	The proposal is unlikely to progress without the application of significant additional funding to address further understanding into practical issues / concerns. The heat network will remain an "idea" and be broadly unsupportable / unproven as a potential practical feature of future heating and energy delivery improvement policies and plans. Runs against the city council's previous policy and general statements on the issue of the potential of heat networks to contribute to Net Zero objectives.
Risks/ Mitigation	No guarantee that on detailed investigation / reporting the roll out of heat networks is a viable, practical, or realistic strategic option under the city council's specific resource constraints. Officers are experienced in such study delivery and will be assisted	The main risks are in the lost opportunity of progressing a potential "generational" proposal to deliver heat networks in the district.

	by the North-West Net Zero Hub, Lancashire County Council, and local stakeholders in defining and specifying the use of any external grant resource offered and securing spend on eligible activities to the general and specific conditions of the administration of public funds.	

6.0 Officer Preferred Option (and comments)

6.1 **Option 1** is preferred.

7.0 Conclusion

7.1 Applying for the HNDU Round 15 Funding presents an opportunity to build on the past years of momentum around heat network policy, feasibility work and heat network zoning and take a leading role in deciding the strategic outcomes and future of heat networks in the district. This aligns with the council's social and sustainability objectives, offering potential wide ranging economic, social, and environmental benefits. If successful, the funding will lead to updated techno-feasibility work and a prospectus providing a clear roadmap for delivering low cost, low carbon heat at scale in the district.

RELATIONSHIP TO POLICY FRAMEWORK

Sustainable District: If found to be a practical a final preferred heat network roll out will promote a sustainable energy and Climate Emergency mitigation goals and the city council's Net Zero objectives.

Inclusive and Prosperous Local Economy: District heating networks have the potential to help address fuel poverty by providing secure heat at a price lower than alternatives. Whilst the development of a district heating system may be capital intensive, district heating systems have the potential to offer stable financial returns to investors, which may then allow access to finance at low rates. This, together with the ability to use efficient heat generation and to feed in low-cost heat (for example waste heat from industrial processes), can result in the ability to supply heat at a relatively low cost, with the security of long-term contracts and the security of a local energy supply giving some protection from the volatility of energy markets.

Healthy and Happy Communities: Improving energy resilience and contributing to Net Zero.

A Co-Operative, Kind and Responsible Council: The proposal builds on existing strategic heat network goals and ambitions.

The district council will benefit from reduced carbon emissions (up to 15,000+ tCO2e annually), improved air quality, energy security, and economic growth through green jobs and investment. The council's leadership is essential for attracting investment, aligning delivery with local priorities, and ensuring the long-term success of heat networks.

CONCLUSION OF IMPACT ASSESSMENT

(including Health & Safety, Equality & Diversity, Human Rights, Community Safety, HR, Sustainability and Rural Proofing)

The study will pave the way for the potential deployment of heat networks in the District which will seek to provide reliable thermal energy delivery at affordable and stable costs to consumers thereby assisting in addressing fuel poverty and helping to ensure homes are a comfortable temperature. This can support greater health outcomes and general wellbeing. It will also help to provide local green jobs and support local supply chains.

Network management is delivered partially though digital platforms. Strategic planning of the networks ensures that the installation of necessary infrastructure within new development as well as strategic installation along with other major projects.

Access to lower-cost heating is essential for helping secure equitable access to thermal energy services, particularly among marginalised and vulnerable populations. Those that experience systemic barriers to affordable heating are most often the elderly, women, single parent households, people living with disabilities, ethnic minorities, migrants, LGBTQ+ individuals, and those living in precarious housing. Prioritising inclusive, affordable and accessible helps to address these disparities and support a just transition that leaves no one behind.

All new heat networks are expected to deliver the lowest cost, lowest carbon heat across heating options. Delivery of low carbon heat helps to mitigate green house gas emissions and reduce the environmental impact of heating in the district. Movement away from combustion-based heating further contributes to air quality improvements.

LEGAL IMPLICATIONS

Should a funding application be successful, the award and use of any external funding offered will be based on a formal contractual funding offer/agreement. No final award document or detailed conditions are available at the current time although the council was in receipt of funds under HNDU Round 11, and an outline is provided in the grant scheme details appended to this report. As an external grant scheme administered by a public body, it is likely any formal grant offer will contain standard conditions familiar to officers used to dealing with the administration of public funds rather than any novel or contentious clauses. However, prior to acceptance of any offer Legal Services team will be asked to review the formal final grant offer / conditions and note any issues that require further resolution or clarifications necessary to protect the city council's general interests.

Legal Services will assist where requested in the formal procurement procedure and contracting of suitable consultants to undertake work although it can be expected that contracting officers will comply with the Council's Contract Procedure Rules and Procurement legislation.

In any future formal arrangements, the council will need to decide the level of involvement it will take such as whether it will take on the role of procuring and overseeing any joint venture, maintaining strategic oversight, and/or ensuring compliance with zoning legislation. It is noted that current pilots are focussing on minimising resource and risk by transferring financial responsibility to the private sector, while retaining influence over key decisions and outcomes. There is likely to be a need for significant procurement support and external legal advice required in future stages and these will be identified in any future reports.

FINANCIAL IMPLICATIONS

As the proposed study is externally funded there are no major financial implications. It is noted in the report that expenditure is likely to be reimbursed on claims submitted in arrears

which is acceptable subject to a binding grant agreement being in place. Appropriate evidence of expenditure will be required to support the claim although this is likely to be compiled by the administrative team within Sustainable Growth Service rather than Finance Team.

In any future role or development of the local Heat Network it is envisaged that the council's direct exposure will be limited. It should not have to commit any capital funding for the delivery of the heat network itself. The private sector development partner will be responsible for raising and investing the capital required. The council's financial commitment will probably take the form of needing to cover revenue costs for procurement, legal advice, communications, and strategic planning – estimates which will be developed through this proposal - and be secured from grants . If any additional revenue costs arise, these would need to be agreed and sourced from government or internal budgets.

The council may apply for government grant funding (such as Green Heat Network Fund) to support initial phases should a heat network project move towards implementation, but the delivery partner would be expected to take on any grant agreement and associated financial risk. The approach will be to keep the council's financial risk very low, while still allowing it to influence delivery and maximise local benefits.

In summary, should the council take on a co-ordinating role in the delivery of a Heat Network it would be entering a complex, long-term partnership that requires financial and legal management, but its direct financial risk should be limited by the delivery model. Pilot authorities experience will be critical in this. As noted in the report, this this current phase of work should clarify matters for decision by Cabinet on next steps in 2026.

OTHER RESOURCE IMPLICATIONS

Human resources Managing the grant application/receipt and contract management processes will be led by officers from Sustainable Growth regeneration team with support from Legal and Property Services, Climate Policy and Energy & Sustainability teams, Lancashire County Council, and local stakeholders.

The council's financial and legal teams (with external support) will play a crucial role in safeguarding the council's future interests in any zone co-ordination role, ensuring compliance, reducing or eliminating financial risk and setting up a robust governance framework for the heat network partnership.

Information Services: No Information Service implications.

Property: No property services implications.

Open Spaces: No open space implications.

SECTION 151 OFFICER'S COMMENTS

The S151 Officer has been consulted and has no further comments to add

MONITORING OFFICER'S COMMENTS

The Monitoring Officer has been consulted and has no further comments to add

BACKGROUND PAPERS

Heat mapping and masterplanning in Lancaster:

https://committeeadmin.lancaster.gov.uk/d

Contact Officer: Paul Rogers
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Ref:

ocuments/s80170/Lancaster%20City%20District%20Heating%20Feasibility.pdf HNZ Opportunity Report: https://assets.publishing.service.gov.uk/media/6839ac1c28c5943237ae65bc/lancaster-zone-opportunity-report.pdf Canal Quarter: https://storymaps.arcgis.com/stories/b0af713b289c4a178829b0c4116eb259 Local Area Energy Plan: https://storymaps.arcgis.com/stories/a7c9f2d6545f498da5e2872e3534e7a8 Local Plan and Planning Policy including SPDs: http://www.lancaster.gov.uk/planningpolicy Lancaster Climate Emergency: http://www.lancaster.gov.uk/climate-emergency Salt Ayre: https://www.lancaster.gov.uk/salt-ayre-leisure-centre/decarbonisation-project-2021	