

Leeds Pipes DHN Customer Connection Agreements

Date: 20/06/2022

Report of: Senior Project Manager, Sustainable Energy and Air Quality

Report to: Chief Officer Sustainable Energy and Air Quality

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

What is this report about?

Including how it contributes to the city's and council's ambitions

- The council's flagship Leeds PIPES District Heating Network (DHN) is operational and has been supplying heat generated at the Recycling and Energy Recovery Facility (RERF) since September 2019 to the initial customers connected to the network.
- In February 2022, the council's Executive Board, approved the recommendations of a report by the Director of Resources and Director of City Development, which detailed plans for the phase 3 extension of the DHN following the success of phases 1 and 2.
- The phase 3 extension, split into four zones of work, will see a number of additional customers connect into the network and be provided heat over the next four years.
- Prior to works commencing to facilitate the connection of these new customers onto the network, commercial Connection Agreements and Heat Supply Agreements need to be signed between the council and the customers, which this report seeks authority for.
- These new commercial agreements will increase the number of customers connected to the DHN, which will see a significant increase in the volume of heat supplied. All customers help improve the commercial position of the network, which was always designed to need growth to break even.
- The increased demand on the network will provide a positive contribution to the council's climate emergency ambition of supporting the city to become net zero by 2030 by supplying low carbon heat to customers as opposed to using traditional gas boilers.
- Given the early stage of the network this is a significant opportunity for the network to deliver benefits aligned to city and council ambitions and will raise the profile of Leeds PIPES.

Recommendations

- a) The Chief Officer Sustainable Energy and Air Quality is requested to note the contents of this report and,
 - i. Provide authority to enter into a Heat Sale Agreement with Secretary of State for Justice to supply heat to Leeds Combined and Magistrates' Courts.

- ii. Provide authority to enter into a Connection Agreement and a Heat Sale Agreement with Robertson Construction Group and Arrow Leonardo Limited respectively, to supply heat to Leonardo and Thoresby Buildings.
- iii. Provide authority to enter into a Connection Agreement and a Heat Sales Agreement with RISE Homes for the supply of heat to its development on Mabgate.
- iv. Provide authority to enter into a Heat Sales Agreement with CRM Students Ltd for the supply of heat to its development on the old College of Technology site.

Why is the proposal being put forward?

- 1 The Leeds PIPES DHN has been successfully supplying low carbon heat generated at the RERF to the initial customers connected to the network since September 2019. Phase 1 and Phase 2 of the network are complete and the network is positioned to be able to supply heat to a range of new customers.
- 2 The council has been in discussions for several years with potential customers across the city who have expressed an interest in connecting. Discussions with four potential customers have advanced positively and the council is now in a position to enter into Heat Sales Agreements with these customers, prior to works to connect the sites to the DHN commencing.
- 3 The four potential customers are:
 - Ministry of Justice – Leeds Combined and Magistrates' Courts
 - Arrow Leonardo Ltd – Leonardo and Thoresby Buildings
 - Rise Homes – Mabgate development
 - CRM Students – Development on site of the old College of Technology building.
- 4 These customers will see the network supply over 4.5GWh of heat per year, which in addition to the existing customers will see the network increase its heat sales to c.38.5GWh per year.
- 5 Individual commercial agreements are at different stages of negotiation with each customer. These are summarised below with further commercial details being provided in the confidential appendix 1.

Secretary of State for Justice– Leeds Combined and Magistrates' Courts

Discussions have been ongoing regarding a connection at the Leeds Courts for a number of years. The council and its principal contractor for the DHN, Vital Energi Ltd, supported MoJ with an application for funding from Phase 3 of the Public Sector Decarbonisation Scheme, for connection to the DHN and associated secondary heating system upgrades. The bid was successful and secured funding for the works, as part of a larger award of £3.5m.

The works will be completed by March 2023 in line with the PSDS funding obligations and the connection will be a significant one for the DHN, adding c2.7GWh of heat demand annually to the network. MoJ have now signed a HSA which requires countersignature from the council.

Arrow Leonardo Ltd – Leonardo and Thoresby Buildings

The council has been in discussions with two parties at this site: Arrow Leonardo Ltd, which will own and operate the buildings upon completion, and Robertson Construction Group Ltd responsible for construction of the development. Heads of Terms have been signed for the Bulk Hot Water Supply with the former and Connection Agreement with the latter which set out the main commercial terms for the connection and supply of heat. The council now needs to enter into a full Connection Agreement and Heat Sale Agreement prior to works commencing.

The development will increase demand on the DHN by 1GWh per year.

RISE Homes – Mabgate development

Positive talks have been held with RISE Homes since 2021 regarding a connection to their first Leeds development in the Mabgate area of the city. The DHN connection into the development of one, two and three bed apartments will require c0.42 GWh of heat per year from the DHN. Heads of Terms have been signed and the council now needs to enter into a full Connection Agreement and Heat Sale Agreement prior to works commencing.

CRM Students – Development on site of the old College of Technology building

A HSA is being finalised with CRM Students Ltd for a connection and supply of heat to a new development on the site of the recently demolished College of Technology building on Woodhouse Lane. HOTS have been negotiated and are currently with the client for signature: the connection will add c0.4GWh of demand onto the DHN. It is anticipated that the HSA will be signed in October 2022 with HOTS being signed in July 2022.

What impact will this proposal have?

Wards affected:

Have ward members been consulted? Yes No

- 6 Approval of the recommendations to enter Connection Agreements and HSAs with the various customers listed in this report will ensure that the council is able to secure a significant number of new customers for the Leeds PIPES network. This is a significant milestone for the project as it will result in a substantial increase in the volume of heat being sold to customers across Leeds and help support the business case for the network.
- 7 Across all sites, over the 20 year period covered by the HSAs, we anticipate additional revenue from the network of c£6.4m. This figure is consistent with the estimates outlined in the February 2022 Executive Board update. This figure does not include income from RHI which will make an additional contribution to the overall revenue.
- 8 Phases 1 and 2 of the DHN have largely focused on connections for public sector organisations and council buildings. This next phase of works, including the connections noted in this report, is a significant push for the council in connecting a large number of private customers onto the network. This will raise the profile of the network in the city and further prove the viability of DHN connections for private customers and demonstrate its benefits, as the council looks to continue its expansion of the network in the coming years.
- 9 Through receiving a connection each of the customers will see a reduction in their overall energy costs across the term of the heat supply. They will also realise a significant reduction in their carbon emissions.
- 10 Equality impact assessment have been completed at various stages throughout the development of the DHN, with the last one being to support the February 2022 Executive Board report. This assessment concluded that the DHN will have a positive impact on equality as it will support the compassionate city equality objective by reducing fuel poverty, helping to increase life expectancy, improves mental health and wellbeing and reduces health inequalities.

What consultation and engagement has taken place?

- 11 The decision to proceed with the construction of Phase 3 of the Leeds PIPES DHN was subject to extensive consultation and engagement with elected members and senior officers, which provided a range of scenarios setting out the positive impact of connecting new customers to

the network. The proposals for the phase 3 extension of the network were approved by Executive Board on 9 February 2022.

- 12 Consultation has taken place with PACS regarding the appropriateness of the HSA to ensure the documents are suitable agreements for the council to enter into.
- 13 The DHN project delivery team have developed the individual commercial proposals with support from Vital Energi Ltd and Ener-vate, a company specialising in the decentralised energy market, to ensure commercial terms are suitably positioned within the market.

What are the resource implications?

- 14 Construction of the DHN was approved on the basis that the council would attract additional customers to the network.
- 15 The proposed commercial connections help to support the business case for the DHN in line with the council intention.
- 16 There are no capital costs associated with each of the connections. Connections are either being funded by the customer, or in the case of the MoJ connection, the Public Sector Decarbonisation Scheme.
- 17 Each connection will generate revenue for the council based on the commercial terms that have been reached, details of which are included within the confidential appendix 1.

What are the legal implications?

- 18 The HSAs are legally binding commitments. The councils PACS team, together with Addleshaw Goddard LLP, have supported with the development of HSAs to ensure the council has the necessary protection and have provided comment on individual customer agreements where amendments have been considered material.
- 19 HSAs are individual to each customer having been discussed and agreed by both parties. However there are a number of areas within each that are worthy of note, which are set out below. Where there is an obligation on the council, these obligations are backed off under the Operation and Maintenance contract with Vital Energi.
 - a) The council shall provide metering and billing services with a preference being for customers to be invoiced monthly for the heat that they have used along with a standing charge;
 - b) The council shall operate and maintain the installed heat assets (e.g. plate heat exchanger, pumps) with the customer responsible for the operation and maintenance of their secondary system within the building.
 - c) The council is responsible for restoring any loss in heat supply:
 - i. Within 3 hours where there is a serious risk to health & safety or there is catastrophic loss of heat, or where there is major damage to a property.
 - ii. Within 72 hours where faults have a serious impact on the comfort of the customer, where there is an impact on heat delivery, or where there is damage to a property.
 - iii. Within 4 weeks where other repairs are required to a Customers connection.
 - d) Where heat on the network is interrupted and the contingency arrangements at the energy centre cannot be maintained, the council shall provide temporary containerised boilers to ensure supply.

- e) Flow temperatures to the customer are maintained within agreed parameters (for example 85 – 95 degC) with customers also required to return heat within agreed parameters.
- f) Where the council has paid the connection cost, the customer shall remain liable for the cost through the term of the agreement, with the cost diminishing on an annual basis.

20 The information contained within confidential Appendix 1 to this report is designated as exempt from publication in accordance with paragraph 10.4(3) of the Access to Information Rules and Schedule 12A(3) of the Local Government Act 1972 on the grounds that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information). The appendix contains detailed pricing information underpinning the Council's heat sales which if disclosed could damage the commercial interests of the Council. Disclosure of this information would seriously harm the Council's negotiating position when discussing heat sales with potential customers. Therefore it is considered that the public interest in maintaining the content of confidential Appendix 1 as exempt outweighs the public interest in disclosing the information.

21 This is a significant operational decision and exempt from call-in. It is a direct consequence of a key decision ref D44638 taken by Executive Board on 17/7/2017.

What are the key risks and how are they being managed?

22 The commercial decisions are complex with a number of variables and related risks, which the project team has been addressing by using conservative assumptions within the DHN model. The principal risks in relation to each of the supply arrangements, with their mitigations are:

No.	Risk	Mitigation
1	Gas price volatility – heat prices are pegged to gas prices, so a decrease in gas prices would reduce income.	To mitigate risks 1&2, the council has stress tested the scenarios with lower figures and the connections remains beneficial.
2	Volume – as we have not started supplying customers, volumes are informed estimates.	
3	Costs of alternative heat source – should the RERF fail to deliver heat, we are liable to provide heat to customers from gas, which is significantly more expensive than RERF heat.	The council has robust contracts in place with both Veolia (RERF) and Vital (Leeds PIPES) to ensure that RERF heat is available wherever possible and gas backup is always available. Short term supply of gas makes little impact on the financial model and a sensible percentage of gas use has been assumed in the model.

Does this proposal support the council's three Key Pillars?

- Inclusive Growth Health and Wellbeing Climate Emergency

23 The Leeds PIPES DHN is a major strategic priority for the city and supplying heat to new customers as proposed directly support the council's three Key Pillars:

- a) The network will provide lower cost heating to the new connections, helping to improve competitiveness and reduce fuel costs for each customer.
- b) The network reduces reliance on gas boilers in dense urban areas, helping to improve air quality and improving health.

- c) The network directly reduces CO2 emissions from heating, which is otherwise difficult and expensive to improve, helping the city to achieve net zero ambitions.

Options, timescales and measuring success

What other options were considered?

- 24 The council has invested significantly in the development of the Leeds PIPES DHN on the basis that it will allow new customers to connect to the network in order to build a city-wide network. The DHN provides potential customers with a viable, long term, low carbon heat source, which can be seen as more favourable than alternative sources of heat.
- 25 In agreeing to connect to the network customers have reviewed the costs associated counterfactual heat sources and the DHN has demonstrated that it provides both financial and carbon savings to each customer, and as such has been seen as their preferred option.
- 26 The project is of strategic importance to the council, reflected by the fact that each phase of works for the scheme has received approval at the council's Executive Board. Whilst providing customers with low carbon and reliable long term heat, the continued expansion of the network and connecting of new customers also improves the business case of the network for the council itself. As noted at paragraph 7, for the sites covered in this report, the additional revenue generated over the 20 year period covered by the HSAs is c£6.4m, which is consistent with the estimates outlined in the February 2022 Executive Board update.

How will success be measured?

- 27 Success will be measured by realising a significant increase in the volume of heat supplied to the new customers once connected. An additional c4.5 GWh of heat will be supplied to these customers.
- 28 Connection to these key partners will help reduce carbon emissions in the city and contribute to the ambition of achieving net zero by 2030.
- 29 These customers will also further raise the profile of the DHN demonstrating to potential customers that connecting to the network can deliver a range of benefits.

What is the timetable for implementation?

- 30 Each of the proposed commercial agreements has its timetable for implementation, however they all result in connections taking place during 2022. The anticipated timetable for the council entering into each agreement is set out below:

Customer	Commercial Agreement	Anticipated Implementation Date
Ministry of Justice	HSA	Immediately following decision
Arrow Leonardo Ltd	HSA	By August 2022
RISE Homes	HSA	By October 2022
CRM Students Ltd	HSA	By October 2022

Appendices

- 31 Confidential Appendix 1.

Background papers

32 N/A