

**Name of meeting:** Economy & Neighbourhoods Scrutiny Panel  
**Date:** 30<sup>th</sup> August 2022  
**Title of report:** Pre-Cabinet Decision Scrutiny Briefing: Huddersfield District Energy Network (HDEN) Outline Business Case Approval

**Purpose of report:**

- To update the Panel on the outcome of the Huddersfield District Energy Network Outline Business Case Study, draft Cabinet report and proposed next steps ahead of Cabinet considering this issue on 20<sup>th</sup> September 2022

Key Decision - Is it likely to result in spending or saving £250k or more, or to have a significant effect on two or more electoral wards?	N/A
Key Decision - Is it in the <u>Council's Forward Plan (key decisions and private reports)?</u>	N/A
The Decision - Is it eligible for call in by Scrutiny?	N/A
Date signed off by <u>Strategic Director</u> & name	Colin Parr, Strategic Director for Environment & Climate Change, 7 <sup>th</sup> July 2022
Is it also signed off by the Service Director for Finance?	Eamonn Croston, Service Director, 15 August 2022
Is it also signed off by the Service Director for Legal Governance and Commissioning?	Julie Muscroft, Service Director for Legal, Governance and Commissioning, 10 August 2022
Cabinet member <a href="http://www.kirklees.gov.uk/you-kmc/kmc-howcouncilworks/cabinet/cabinet.asp">http://www.kirklees.gov.uk/you-kmc/kmc-howcouncilworks/cabinet/cabinet.asp</a>	Cllr Naheed Mather, Environment Cllr Will Simpson, Culture & Greener Kirklees The following Cabinet Members have also been consulted due to the relevance to their portfolios: Cllr Paul Davies (Corporate) Cllr Graham Turner (Regeneration)

**Electoral wards affected:** Huddersfield Town Centre (Dalton & Newsome)

**Ward councillors consulted:** None

**Public or private:**

This report is public with a private appendix.

This report is accompanied by a private appendix in which commercially sensitive information is provided. The Appendix to this report is private in accordance with Schedule 12A Local Government Act 1972, as amended by the Local Government (Access to Information) (Variation) Order 2006, namely it contains information relating to the financial and business affairs of third parties (including the Authority holding that information). It is considered that the disclosure of the information would adversely affect those third parties including the Authority and therefore the public interest in maintaining the exemption, which would protect the rights of an individual or the Authority, outweighs

the public interest in disclosing the information and providing greater openness and transparency in relation to public expenditure in the Authority's decision making.

**Has GDPR been considered? Yes**

### **Report Note**

1. This report presents the attached draft Cabinet report and accompanying appendices and private appendices for consideration by the Economy & Neighbourhoods Scrutiny Panel on 30<sup>th</sup> August 2022.
2. The purpose of the report is to provide an update on the outcome of the Huddersfield District Energy Network Outline Business Case Study, draft Cabinet report and proposed next steps ahead of Cabinet considering this issue on 20<sup>th</sup> September 2022.
3. **The Panel is requested to note that the Private Appendices contain exempt information and are confidential.** The intention is for this information to help Panel members consider the issue and proposal and is not to be shared further.
4. It should also be noted that the report to Cabinet is still a draft work-in-progress and is subject to further amendments and revisions ahead of the Cabinet date on 20<sup>th</sup> September 2022. This will include the intention to take into account comments from the Panel.
5. The Draft Cabinet Report follows on Page 3.

**Name of meeting:** Draft Report for Cabinet  
**Date:** 20<sup>th</sup> September 2022  
**Title of report:** Huddersfield District Energy Network (HDEN) Outline Business Case Approval

**Purpose of report:**

- To update Cabinet on the outcome of the Huddersfield District Energy Network Outline Business Case Study and request approval in principle to progress to the Full Business Case stage
- For Cabinet to indicate their support in principle to taking forward the capital requirements of the scheme for consideration as part of the Council's Medium Term Financial Strategy for 2023/24 onwards.

<b>Key Decision - Is it likely to result in spending or saving £250k or more, or to have a significant effect on two or more electoral wards?</b>	<b>Yes</b>  <b>If yes give the reason why: Spending of more than £250k</b>
<b>Key Decision - Is it in the <u>Council's Forward Plan (key decisions and private reports)?</u></b>	<b>Key Decision – Yes</b>  <b>Private Report/Private Appendix – Yes – Public report with a private appendix</b>
<b>The Decision - Is it eligible for call in by Scrutiny?</b>	<b>Yes</b>
<b>Date signed off by <u>Strategic Director</u> &amp; name</b>	<b>Colin Parr, Strategic Director for Environment &amp; Climate Change, 7<sup>th</sup> July 2022</b>
<b>Is it also signed off by the Service Director for Finance?</b>	<b>Eamonn Croston, Service Director, XX August 2022</b>
<b>Is it also signed off by the Service Director for Legal Governance and Commissioning?</b>	<b>Julie Muscroft, Service Director for Legal, Governance and Commissioning, XX August 2022</b>
<b>Cabinet member</b> <a href="http://www.kirklees.gov.uk/you-kmc/kmc-howcouncilworks/cabinet/cabinet.asp">http://www.kirklees.gov.uk/you-kmc/kmc-howcouncilworks/cabinet/cabinet.asp</a>	<b>Cllr Naheed Mather, Environment</b>  <b>Cllr Will Simpson, Culture &amp; Greener Kirklees</b>  <b>The following Cabinet Members have also been consulted due to the relevance to their portfolios:</b>  <b>Cllr Paul Davies (Corporate)</b>  <b>Cllr Graham Turner (Regeneration)</b>

**Electoral wards affected:** Huddersfield Town Centre (Dalton & Newsome)

**Ward councillors consulted:** None

**Public or private:**

This report is public with a private appendix.

The Key Decision Notice has been issued and this report is accompanied by a private appendix

in which commercially sensitive information is provided. The Appendix to this report is private in accordance with Schedule 12A Local Government Act 1972, as amended by the Local Government (Access to Information) (Variation) Order 2006, namely it contains information relating to the financial and business affairs of third parties (including the Authority holding that information). It is considered that the disclosure of the information would adversely affect those third parties including the Authority and therefore the public interest in maintaining the exemption, which would protect the rights of an individual or the Authority, outweighs the public interest in disclosing the information and providing greater openness and transparency in relation to public expenditure in the Authority's decision making.

**Has GDPR been considered? Yes**

## **1. Summary**

- 1.1. In January 2019, Kirklees Council declared a Climate Emergency and proposed an ambitious programme of activity to address the emergency<sup>1</sup>. 'Net Zero' carbon emissions require significant societal changes to how we all live and work, with an urgent need to dramatically reduce our emissions and to adapt locally to a changing climate.
- 1.2. Kirklees Council wishes to rise to this challenge and be a leader to achieve this change with our local partner organisations, businesses and residents with the help and support of the national government and regional partners and aligned to our corporate ambitions for People, Places and Partners. This will be a challenging ambition, but it is also a great opportunity to improve our quality of life and create a borough that is healthier, more sustainable and fairer for everyone.
- 1.3. This report summarises the work undertaken to date regarding a Huddersfield District Energy Network (HDEN, also known as a 'heat network'), one of the Council's key carbon reduction projects, following a Cabinet Decision to undertake an Outline Business Case in February 2021. It presents and summarises the results of the Outline Business Case stage of work and sets out decisions required for the next phase including progressing the Outline Business Case to Full Business Case and how the Council can achieve the successful delivery of a Heat Network.
- 1.4. The report sets out recommendations for Cabinet to approve the OBC, agree in principle proposed capital borrowing requirements (subject to subsequent Full Business Case approval) for the Huddersfield District Energy Network ( HDEN), and delegate authority to the Strategic Director for Environment and Climate Change in order to develop the scheme to Full Business Case stage (this stage of work is collectively referred to as Commercialisation).
- 1.5. The report private appendix (the Outline Business Case (OBC) ) is to be considered in private, due to the content containing commercially sensitive information about future commercial negotiations and commercially sensitive information relating to the Council and HDEN potential customers (also known as off-takers).

## **2. Information required to take a decision**

### **Background**

- 2.1. The decarbonisation of heat supply is recognised by government as a key challenge to address to achieving the Paris Agreement (2015) aim of limiting the global rise in temperature to well below 2°C. Kirklees Council declared a Climate Emergency in 2019, recognising the challenges of a changing climate facing the area and has adopted an over-arching target for achieving net-zero carbon emissions for the district by 2038.
- 2.2. Government policy promotes the installation of District Energy Networks (DENs) as one of the most favourable means to decarbonise the local heat supply<sup>2</sup>. By utilising a low carbon energy source, a DEN can very efficiently deliver heat and power to end users where there is sufficient density of demand.
- 2.3. District heat networks feature a system of insulated pipes which distribute heat (in the form of hot water) from a centralised heat generation plant to a number of different buildings to provide space heating and hot water. Instead of individual boilers, each building has a heat interface unit (HIU) which supplies heat from the network to the local building distribution system. For power

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<sup>1</sup> <https://www.kirklees.gov.uk/beta/climate-emergency/index.aspx>

<sup>2</sup> For further detail see the HM Government – Heat and Buildings Strategy 2021 (<https://www.gov.uk/government/publications/heat-and-buildings-strategy>) and HM Government Guidance on Heat Networks (<https://www.gov.uk/guidance/heat-networks-overview>)

(electricity), a local 'private wire' electricity network is can be installed in order to connect the energy source to the end customer.

- 2.4. Schemes can range in size from simply linking two buildings together, to spanning entire cities. In some countries the use of district heating is widespread. For example, in Denmark around 60% of the country's homes are connected to heat networks, including a scheme which supplies the whole of Copenhagen (these larger schemes tend to 'grow' incrementally over time as more heat sources and customers are added).
- 2.5. Generating and distributing heat at a district scale allows lower carbon forms of heat generation to be used which would not be viable at a building scale, including the capture and delivery of waste heat from power generation, energy from waste, or the transition to technologies such as combined heat and power engines and heat pumps.
- 2.6. DENs are considered a key low/zero carbon 'enabling' infrastructure, as once the network infrastructure is in place, it is both long-lasting (pipework typically lasts 40-50 years plus) and able to accommodate different sources of heat. This means that once an existing source of energy (e.g. the EfW) reaches end of life, it can be 'unplugged' and replaced by a new source that potentially has better 'net zero' carbon emissions credentials. For this reason, heat networks are considered by Government to be a key enabler in delivering net zero for urban environments.
- 2.7. Furthermore, DENs can develop and evolve over time, provided that the end customers can be matched to the amount of energy being fed into the network. The development of the HDEN has been predicated for identifying a sustainable basis for establishing a viable DEN. Once this first phase has been established and a cash-flow established, options can then be considered for how the network may evolve and grow over time.
- 2.8. DEN development is a step-by-step process, supported by Grant funding from the Department of Business, Energy and Industrial Strategy (BEIS) Heat Networks Delivery Unit (HNDU). The Council has previously benefitted from project development funding support from HNDU in order to undertake a Feasibility Study into the potential for a Huddersfield DEN, which was completed in 2018. The Council subsequently was successful in a further funding allocation from HNDU in order to further develop the opportunity to the completion of an Outline Business Case. This is known as the 'Detailed Project Development' (DPD) stage.
- 2.9. The development of DENs has been consistently supported by Government since 2014. The Government is supporting DEN development beyond the DPD stage through the new 'Green Heat Networks Fund' (GHNF), which launched in March 2022. This is a 3 year £288m capital grant fund that can support the commercialisation and construction of new low and zero carbon DENs. The scheme can support up to 50% of the construction and delivery costs of a DEN (and as part of these overall 50% of costs up to 100% of the costs of commercialisation – i.e. progressing the scheme to Full Business Case).
- 2.10. In Huddersfield there is a DEN opportunity arising from utilising the potential heat and power from the existing Huddersfield Energy from Waste (EfW) plant and delivering this as a low carbon energy solution for sites within the town centre. Furthermore, DENs are 'technology agnostic' meaning that when a heat source reaches end of life, it can be 'unplugged' and replaced with a new lower-carbon heat source, due to the long-lasting nature of the network infrastructure itself. Because of this, DENs play a key role in the Government's strategy for the decarbonisation of heat. EfW plants are included by Government as a source low carbon heat. Utilising the EfW is expected to deliver carbon savings in the region of 68% when considered against a 'business as usual' scenario of individual gas-fired boilers.
- 2.11. This Cabinet report follows on from an earlier report considered on 16<sup>th</sup> February 2021, which provided authorisation for the authority to undertake the next 'Detailed Project Development' stage of heat network development, resulting in a completed Outline Business Case (OBC). This

is now complete and appended to this cabinet report. Key findings are summarised in this report. The OBC follows the HM Treasury's 'Five Case' Model and is comprised of five separate cases, as follows:

- **Strategic Case:** Sets out the strategic context, requirements, and benefits of undertaking the delivery of a District Energy Network in Huddersfield
- **Economic Case:** Summarises the analysis, decisions and steps taken by the project team to go from a longlist of options to a shortlist and finally a preferred option for the DEN.
- **Commercial Case:** provides detail of the commercial, legal and governance considerations that have been examined to develop a robust approach for the delivery of the DEN.
- **Financial Case:** Sets out the financial performance of the preferred option that was established in the Economic Case and it seeks to demonstrate the financial robustness of the preferred option under a set of clearly stated assumptions.
- **Management Case:** Sets out the next steps on the project in order to progress from OBC to Full Business Case (FBC).

2.12. Project Objectives and Critical Success Factors were agreed for the scheme in consultation with relevant internal Senior Officers and Portfolio holders. These are set out in the Strategic Case and are also summarised below:

### Project Objectives

Item	Project Objectives (in order of priority)	Related Critical Success Factors
1	Help meet Kirklees Council's <b>climate objectives</b> and contribute to achieving district <b>net zero</b> by 2038.	3
2	To deliver a large-scale, long-term energy infrastructure project that <b>delivers measurable decarbonisation</b> and <b>air quality improvements</b> to the local area.	3
3	To contribute to the <b>regeneration of Huddersfield</b> by facilitating supply of low carbon energy to a mix of private and public sector buildings including new and existing buildings.	3, 6
4	To deliver the project in a way which <b>provides the best overall balance of value and risk to the council</b> , acting as an early adopter of district energy in the UK.	1, 4, 7, 8
5	Delivers <b>energy for a fair price</b> , delivers <b>good levels of customer service</b> and protects its customers, including those that are vulnerable. <sup>3</sup>	2, 4, 6, 7
6	Provides <b>a stimulus to the local economy</b> by retaining wealth locally, and by providing job opportunities throughout construction and operation.	1, 4, 6, 7
7	Act as <b>a catalyst for the development</b> of further decarbonisation projects in the borough, through in-house capacity and knowledge building.	1, 3, 5, 6
8	Be an enabler and attractive to the <b>future re-investment in the Kirklees EfW</b> .	4, 5, 8

<sup>3</sup> Whilst the aspiration towards customer service is valid, vulnerable customers are not currently within the planned off-taker customers for the first phase of the network. Off-takers have been identified on the basis of being stable, usually public sector partners considered able to commit to longer term power purchase agreements in order to facilitate the establishment of a stable, economically viable network.

### Critical Success Factors (CSFs)

Item	Critical Success Factor
1	<p><b>PROCUREMENT</b></p> <p>The project must be set up and procured in accordance with the Council's procurement strategy with consideration to social value and insourcing.</p>
2	<p><b>CUSTOMER PROTECTION</b></p> <p>The scheme must ensure customers are receiving levels of service which reflect market good practice, and at least as good service vs. alternative heating options in terms of price, quality of service and protection.</p>
3	<p><b>ADDRESSING THE CLIMATE EMERGENCY</b></p> <p>The scheme must have a clear strategy for providing an affordable, secure, low carbon supply of heat in the short, medium and long-term, including supporting a zero-carbon objective and improvements to local air quality.</p>
4	<p><b>FINANCIAL RETURNS</b></p> <p>Council has control of where the financial benefits of the scheme accrue. Project must deliver a threshold IRR to Council to justify investment against associated risk and non-fiscal reward.</p>
5	<p><b>FUTURE DEVELOPMENT</b></p> <p>Scheme structure supports further expansion, connections, or changes in technology which may create beneficial outcomes.</p>
6	<p><b>SOCIAL</b></p> <p>The project must support the Council's wider objectives of regeneration and enhancement.</p>
7	<p><b>CONTROL</b></p> <p>The Council can control the scheme with the aim of ensuring project outcomes are met in terms of risk transfer and pricing.</p>
8	<p><b>FUNDING</b></p> <p>Scheme enables access to external funding.</p>

2.13. To undertake the completion of this OBC, the Council has procured the support of the following specialist external consultants:

- AECOM – Technical
- Hermetica Black – Commercial
- Asteros Ltd – Financial
- Womble Bond Dickinson – Legal
- Avieco – Project Management support

2.14. The scheme has been managed by the Council's Air Quality, Energy and Climate Change Team, part of the Environment and Climate Change Directorate.

### Proposed Preferred Option for HDEN Development

#### Techno-Economic Summary (Economic Case)

2.15. As referred to above and set out in more detail in the Economic Case, the development of a DEN is an iterative process of refinement to go from longlist to shortlist to preferred option for delivering the DEN. This continues and further refines the favoured option set out in the 2018 Feasibility study report.

2.16. The preferred option is identified as being the delivery of low carbon heat and electricity from the existing Huddersfield Energy-from-Waste (EfW) plant to serve a mixture of Council and non-Council sites in and around the town centre. Heat is provided via a network of underground insulated pipes carrying hot water. Electricity will be delivered via a separate 'private wire' electricity network. A separate energy centre is proposed to be located at a Council-owned site at



37 Old Leeds Road. This will house pumps (for pumping the water around the network), plus accumulator vessels to store heat (hot water) and help smooth the network demand. It will also contain back-up gas boilers for providing heat during periods when the EfW is offline (due to planned maintenance or unexpected outages). Back-up electricity will be provided via the national grid.

2.17. The preferred option utilises the existing EfW (itself originally designed to output heat into a heat network) and has been assessed as best meeting the above CSFs.

2.18. As per the CSFs, the scheme is intended primarily as a carbon reduction scheme, designed to increase the energy efficiency of the infrastructure associated with Huddersfield Town Centre (currently overwhelmingly derived from gas-fired boilers). Over the scheme lifespan (40 years) the HDEN is assessed on the Economic Case as saving 111,400 tonnes of CO<sub>2</sub>. To put into context relative to the current 'business as usual' scenario (natural gas-fired boilers), the scheme is expected to achieve carbon savings of approximately 70%.

2.19. The scheme is also considered comparatively commercially attractive and self-financing in its own right (over a reference 40 year period – the network's nominal lifespan) in that it is designed to generate a financial operating surplus to repay any Council investment in the scheme and achieve an internal rate of return (IRR) greater than 6%, the rate typically considered viable for public sector schemes. Once the potential carbon savings achieved by the scheme are considered, which is included in the Social IRR (SIRR), a rate of above 11% is expected to be achieved for providing heat and power from the EfW. This is discussed further in the Private Appendix OBC Economic case. Current alternatives to a DEN, such as building-specific Air Source Heat Pumps are not considered likely to generate an equivalent return.

2.20. An alternative to facilitating low carbon heat solutions to buildings are site specific solutions. This is effectively the current situation due to the historic prevalence of gas boilers fired by natural gas and the historically relatively low price of this fuel source. However, for reasons of comparatively high carbon intensity of natural gas this approach is expected to be phased out by Government over the medium term. In addition, when coupled with the current price spikes and fluctuations it can be argued that the status quo delivers neither sufficiently low carbon heat, nor stable pricing to assist with financial planning. A DEN is considered to help deliver both of these points.

2.21. Operating a DEN infrastructure allows the heat source to be optimised for maximum efficient delivery and avoids the need to manage tens of individual boiler plants in individual sites. It also provides resilience and facilitates future decarbonisation through replacement of the heat source at a single point – such as the potential replacement of the EfW with a new facility when the current EfW reaches end of life, or replacement with a different low/zero carbon technology, such as heat pumps. In this way the benefits of the existing EfW can be utilised, whilst also allowing time for future potential heat sources to be considered.

It should also be noted that a DEN infrastructure is complex and requires careful design and optimisation, alongside significant engineering required to install the insulated pipework. Each option has considered a similar proposed route layout which has been considered with input from key Officer stakeholders managing the highways network and current and planned highways projects. Nonetheless, the route will be subject to further consultation and, if necessary, amendment following at the Commercialisation stage of the scheme.

### **Preferred Low and Zero Carbon Energy Options**

2.22. Following a process of refinement and shortlisting, the Economic Case presents three shortlisted options for supplying the HDEN:

- **Option 1: EfW (heat and power):** taking heat and electricity from the existing energy from waste (EfW) plant, surplus electricity (around 40% of annual output) would continue to be exported to the national grid as it is currently).

- **Option 2: EfW (heat only):** taking heat only from the existing EfW (all electricity would continue to be exported to the national grid as it is currently).
- **Option 3: Heat pump (heat only):** constructing a purpose-built heat pump system consisting of a water source heat pump (WSHP) drawing heat from the River Colne and an air source heat pump (ASHP). These heat pumps would run on electricity to extract air from the river and ambient air to supply the HDEN with heat only, no electricity is produced through this process.

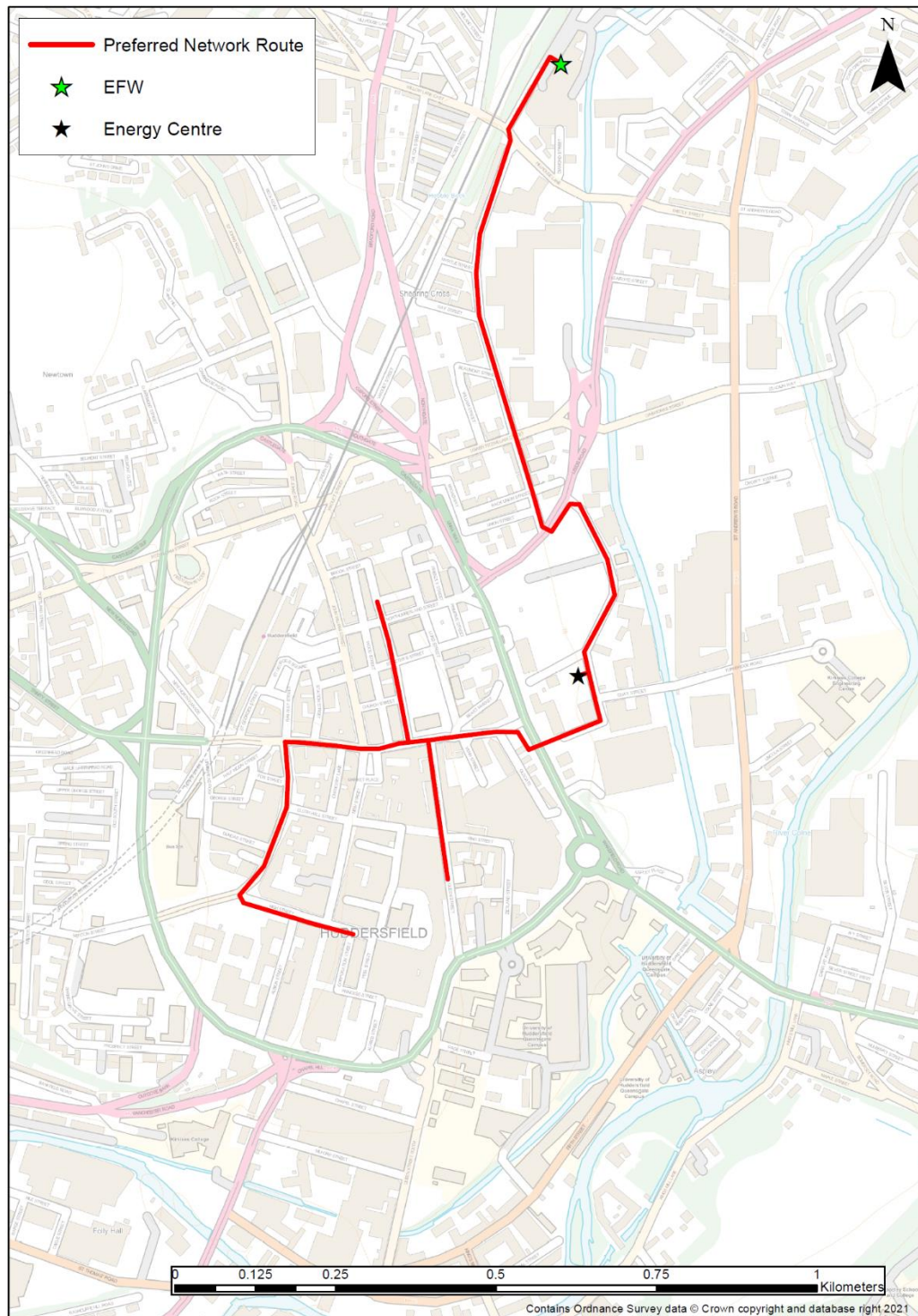
2.23. Utilising the EfW (Options 1 and 2) is expected to generate significant carbon savings versus 'business as usual' (i.e. individual gas boilers), and both options are expected to generate significant carbon savings. These have been modelled in the economic case as well over 111,000 tonnes over the 40 year period (assuming EfW as the energy source). Broadly speaking, this represents a carbon saving of approximately 68% versus individual gas boilers. Further decarbonisation could also be achieved depending upon future energy sources considered for the network.

2.24. It is noted that the EfW is part-way through its anticipated operating lifespan. This provides the basis for a HDEN heat source whilst allowing for ample time to consider subsequent energy source options. This is considered in more detail in the Private Appendix OBC Strategic Case.

2.25. Modelling of these three potential energy sources established that the only option which was calculated to deliver positive economic returns is option 1, taking heat and power from the EfW plant. This means that at the time of writing, only a heat and power network using the EfW plant achieves an economically viable option. The EfW is the lead low carbon heat and power source, with a separate purpose-built energy centre providing gas backup and thermal storage. This option achieves both positive Internal Rate of Return and Social Internal Rate of Return scores (prior to the additional financial considerations of the financial case). Option 2 (EfW-derived heat only) does not achieve the required level of economic viability.

### **Network Route and Extent**

2.26. As set out in the Private Appendix Full OBC Economic Case (section 2.3), the network route has been designed to serve a core group of town centre buildings, with the network extent (and cost of pipework) balanced with the energy available from the EfW, alongside connecting sufficient off-takers to achieve a commercial return, whilst also managing other constraints, such as crossing trunk roads and waterways. This means that the network requires approximately 6.2km of heating pipework and 14.1km of private wire cabling. This is intended as 'phase 1' of the HDEN with the aim of establishing a viable a network whilst also minimising risk through focusing on primarily Council and public sector sites as off-takers, plus a small number of commercial clients. This analysis is based upon this configuration of the network. This is intended to be flexible, and over time, further expansion of the network could take place. The proposed network route is illustrated in the diagram below.



**Figure 1 Proposed Network Route**

2.27. The Network route has been carefully considered in order to ensure the network is able to balance connecting a sufficient number of town centre premises with a pipe network that is not disproportionately costly and that ensures that the network retains viable. It is important to note that this route represents the first phase of the network and that in future the network is designed to be able to be added to in order to connect additional buildings and alternative energy sources. The network route has been designed following consultation with internal stakeholders in relation to other schemes currently planned or underway and affecting the highway that could potentially be in conflict with this scheme. The route will be revisited at the commercialisation stage along with this related engagement to ensure that these assumptions remain valid. Ground-penetrating survey work will also be undertaken for identified route 'pinch points' where further detailed evidence may be needed.

## Customers/Energy Off-takers

2.28. Network Customers have been considered in terms of their ability to commit to longer term power-purchase agreements (which the public sector is typically able to do) alongside their strategic town centre locations. It is therefore expected that Council sites will connect where their location allows and where technically possible. The HDEN provides a means of decarbonising the supply of heat at the point of entry of the building, reducing the dependence on building fabric improvement in order to achieve the Council's net zero commitments. Off-takers are detailed in the Private Appendix OBC Economic Case and can be broken down as follows in the table below. The extent of connections represents a balance between sufficient customers to justify the first phase of the network, whilst also remaining economically viable

Off-taker	Engagement through the OBC process
Existing Council-owned sites in the town centre.	Engagement meetings between the HDEN project team and internal Asset Strategy and Technical Services teams along with the Council's Energy Engineer. Representation invited from all on the project Board.
Future Council developments (such as those coming forward through the Huddersfield Blueprint, including the Cultural Heart scheme)	Engagement meetings with the following: <ul style="list-style-type: none"> <li>• Relevant Blueprint Programme Managers to identify where project completion dates can align with the HDEN.</li> <li>• Town Centre Highways scheme managers to identify a network route that takes into account current and planned highways schemes</li> <li>• Two specific HDEN meetings have taken place with the team managing the sustainability approach for the Cultural Heart Scheme. The HDEN provides a significant opportunity to provide low carbon heat to this significant redevelopment in the town centre.</li> </ul>
External Partners (Four potential external organisations within Huddersfield Town Centre)	Individual stakeholder engagement with each separate party in order to provide information on the scheme opportunities and to gain asset information and energy usage data. The latter has been used to inform the assessments made in the production of the Economic Case.

2.29. For sites that cannot connect on day one (e.g. if there is existing energy plant infrastructure not yet close to end of life or if the site development timescales cannot align with the HDEN) then there is a potential for a future phased connection to the network.

2.30. External partners have been identified though being considered able to commit to longer power-purchase arrangements or to be located in a strategically beneficial location for the HDEN.. It is important to note that at this stage external partners have been engaged in the development of the scheme and OBC, as a mutually beneficial opportunity. There has been no formal commitment to the scheme agreed as yet, and this customer acquisition process is intended as a key task for the Commercialisation stage (i.e. for the Full Business Case).

## **Design of the Energy Centre**

2.31. The Economic Case sets out the proposed rationale for the location and shortlisting process for agreeing the site at 37 Old Leeds Road for this purpose. This was supported by the Council's Asset Governance Board in September 2021. Following consultation with internal stakeholders, the desire to use this facility to make a bold visual statement of the building's purpose was agreed, which would also help support the regeneration of this area of the Town Centre. Illustrations of the preferred Energy Centre Design are included in the Private Appendix OBC Economic Case. At the appropriate point during Commercialisation the Strategic Director (Development) will be requested to formalise the decision to allocate the land for the Energy Centre.

## **Commercial Preferred Option**

2.32. The Commercial Case sets out the details of the commercial, legal and governance considerations for the delivery of the HDEN. Five key commercial factors are set out which determine the proposed Commercial structure:

- The Council cannot operate a DEN on a commercial basis without establishing a standalone company (a special purpose vehicle or also known as an Energy Services Company, or ESCo).
- The DEN operator cannot be the private wire supplier without a supply licence (in practice, this means that either an organisation with a supply licence is needed as the supplier, or in the case of the EfW, the operator of the plant is considered to qualify for supply exemptions)
- The DEN depends upon close integration with the EfW Plant and Waste contract. The procurement of a new waste services contract provides a key strategic opportunity achieve mutual benefits for both schemes.
- The economic viability of the private wire element of the DEN is sensitive to current and future electricity market governance changes.
- The profitability of the DEN depends on an appropriate level of heat and power demand being secured from customers.

2.33. Following internal consultation and engagement with senior officers, relevant portfolio holders and other council officers, the recommended commercial structure for the HDEN that best meets the critical success factors is the establishment of a wholly council-owned Energy Services Company (ESCo) to install, own and operate the network, including the private wire assets. This is proposed to be a company limited by shares, with Kirklees Council the sole shareholder. This is set out in more detail in the Private Appendix OBC Commercial Case, alongside the other options considered. In summary, this model allows the following:

- The Council can engage in commercial activity without breaching its mandate
- Allows the most ability to manage the interaction between the procurement of the HDEN and the waste services contract.
- Balances profitability with achieving Kirklees' carbon reduction, regeneration and affordability goals,
- Provides a means for the council to benefit from the financial returns of the project; and
- Provides flexibility to allow a future change in commercial direction if required

Whilst a wholly-owned ESCo is considered the 'best fit' for the scheme, it is also important to note that any commercial structure will incur an element of risk to the authority. In the case of a wholly-owned ESCo there are also risks incurred through the need to potentially absorb losses and fund cash flow and future investment need The Council will need subsidy control advice from legal advisors to ensure that the arrangements meet the appropriate arms-length requirements. There would also be a reputational risk, should the scheme not achieve the anticipated benefits..

2.34. There are two sources of revenue for the HDEN, which are detailed in the Private Appendix OBC Commercial Case.

- a) Sale of heat to commercial (and, in future, domestic) customers; and

- b) A “use of system” charge for the private wire. The Electricity Order 2001 prevents the ESCo from acting as the supplier of electricity to customers over the private wire without a supply license, and so the EfW Operator is required to play this role.

2.35. Because of the above, the procurement of the new waste services contract (including operation of the EfW) for the Council is a critical strategic opportunity to align with the HDEN in order to benefit both contracts. Whilst a principle of the HDEN project is that it should also offer benefits to the Waste/EfW Contract, the obligation may have impacts upon the commercial position of the contractor, which may influence the cost of waste disposal or create contractual complications in the event of the DEN project not progressing

2.36. Further Commercial and Financial considerations relevant to the Council are set out at section 3 of this report.

2.37. Taking into account the above elements of the scheme, the Management Case sets out the tasks required for the delivery of the Commercialisation Stage, which is intended to develop the scheme from the Outline Business Case to the Full business Case Stage. These tasks are summarised in the Private Appendix OBC Management Case and form the basis of the Officer recommendations in this report.

The tasks identified for Commercialisation are divided between two elements of work:

<p>1) ‘Bridging’ activities - Funding required for interim activities required to take place /ahead of/in parallel with the OBC approval by Cabinet.</p>	<p>This is comprised of:</p> <ul style="list-style-type: none"> <li>• ‘Bridging’ activities needed to align the HDEN project and the EfW re-contracting process, such as the “Enabling works and Interdependencies”. This needs to take place ahead of OBC approval to meet the Council’s deadlines for the re-contracting of the waste and EfW contract (a process commencing in November 2022).</li> <li>• To provide external support to prepare and submit a bid to the Green Heat Network Fund in conjunction with the Council. Round 2 of the GHNF closes on 26 August, so it is therefore required for this application to take place ahead of the OBC Cabinet Approval.</li> </ul>
<p>2) Main Commercialisation programme (OBC to FBC)</p>	<p>To progress the scheme from OBC to Full Business Case and undertake the remaining tasks in the table above. A breakdown of these costs is provided within the full OBC document Management Case. Subject to Cabinet approval, this stage will commence immediately.</p>

2.38. As noted above, the Council has prepared a grant submission to the Government’s Green Heat Networks Fund (GHNF). This is the Government’s primary means of supporting DEN development post-OBC and is an important potential source of grant funding for the Commercialisation phase (developing the OBC to Full business Case) and also up to 50% of the overall eligible scheme construction costs. The GHNF scheme was being launched in March 2022 as the HDEN OBC was being finalised. Whilst grant support is considered highly beneficial to the HDEN (and the scheme is considered likely to be supported by the GHNF), there are restrictions to the GHNF that will need to be managed. The primary issue is that the full GHNF grant (for construction) must be drawn down before 31 March 2025. This means that the proposed approach set out in the Private Appendix (Full OBC document) to align the construction start date with the anticipated award of the Council’s Waste Contract would not be likely to be eligible for grant support from the scheme. In order to mitigate this, the anticipated construction start date for the HDEN would need to be brought forward to April 2024-March 2025 to occur in advance of the new

waste contract anticipated start date (and is a change to the sequence set out in the Full OBC (see Private Appendix). This would allow draw-down of the full, anticipated GHNF grant.

2.39. The HDEN project team considers that the risks and changes to the timescales (including the reduced time period for commercialisation) are manageable and are outweighed by the anticipated benefits of accessing the GHNF. The anticipated risk and mitigation of this issue is set out at the Risk management section below. N.B. The draw-down of the anticipated GHNF construction grant (as opposed to the commercialisation GHNF funding), would only take place in any case following the completion of Commercialisation and approval of the resulting Full Business Case. These timescales are set out at section 5.

## **Benefits and Risks**

### **Project Benefits**

2.40. As set out in the Strategic Case, the scheme is expected to offer a number of anticipated benefits:

- Significant carbon reductions through accessing low carbon heat available from the EfW and not otherwise available to individual sites. Modest improvements to Air Quality are also expected through the removal of typically old individual gas boiler plants.
- Reduction in energy bills through the potential for the EfW heat being available at a lower cost than natural gas and less susceptible to price fluctuations
- A Local dividend through the opportunity to build revenue from the energy sold to local customers and the retention of this income locally.
- Social benefits achieved through the development of the pricing strategy
- The wider benefits of investment in the local area and economy creating employment and supply chain opportunities

### **Risk Management**

2.41. The project team has sought to maintain a proactive approach to risk management throughout the development of the OBC. Each case summarises the key risks associated with that particular element of the scheme. The management case addresses the main risks identified within the commercialisation phase, as the project moves to issue of FBC. These key project risks are detailed within the Management Case, with each case set out in detail in the Private Appendix (Outline Business Case Full Report)

2.42. Whilst the OBC sets out the basis for an economically viable scheme, it is also important to recognise that a scheme of this nature is subject to a range of interrelated risks resulting from the contractual relationships required for the scheme to be successful:

2.42.1. The relationship with the EfW. The presence of the HDEN is considered to offer a significant opportunity for the Council's core waste contract to also deliver wider strategic outcomes related to carbon saving. However, it is also recognised as risk to the council's waste contract process, should the HDEN not happen.

2.42.2. The scheme is also dependent on several external energy customers (off-takers), who have been identified based upon their ability to potentially agree longer term power-purchase agreements. However, should these partners choose not to participate in the scheme, it is likely to have an impact on the project viability. These sensitivities are modelled in the economic case.

2.42.3. The need for 'private wire' electricity supply to be built into the scheme in order to deliver commercial return. This is the only scheme option which is economically viable, but also adds a further contractual element to the relationship with the EfW Operator. Due to licensing requirements relating to the supply of electricity the generator (the EfW Operator) will need to be the supplier to the end customer that will use the HDEN ESCo's private wire network for transmission (and generate a 'use of system' charge for the HDEN). This relationship is set out in more detail in the Private Appendix OBC Commercial Case. The OBC concludes that the benefits of the private wire outweigh these further complications.

2.43. As a consequence of the GHNF application (set out at 2.38), the construction of the HDEN (assuming FBC approval) will need to have commenced ahead of the Council's securing of a new EfW operator through the Waste contract process, leaving the network at risk of prolonged operation solely by back-up gas boilers. This risk will be mitigated by the following:

- Maintaining the ongoing focus on the alignment between the EfW Contract and HDEN teams to ensure that a future operator is able to supply heat.
- As part of Commercialisation to develop a robust plan for delay of the EfW procurement process in relation to back up heat supply (utilising the proposed back up gas boilers for the scheme in the interim)
- Continue to engage with Government partners for HDEN and Waste (BEIS and the Department for Environment, Food and Rural Affairs (DEFRA), respectively to promote alignment between the waste and DEN agendas.
- There will be a further decision point at Full Business Case, at which the HDEN would not proceed in the absence of resolution to this issue or would require further consideration if the supply of heat cannot be secured from the EfW Operator.

### **3. Implications for the Council**

- **Working with People**

3.1. This proposal can be considered an 'enabling' scheme to facilitate the future ability of Huddersfield businesses and residents to access low carbon, resilient energy. The scale of the scheme at present is primarily aimed at establishing an economically viable DEN. In future, options can be considered for how the network can expand. Part of this includes how the Council may use this infrastructure to help Huddersfield businesses and residents on carbon reduction journeys.

- **Working with Partners**

3.2. Collaboration with partners has and will continue to be a key principle of the scheme. The Council and the potential off-takers have collaborated in order to develop the feasibility study and OBC to this point, recognising the future infrastructure potential of the HDEN in facilitating 'net zero'. Utilising energy from the EfW helps achieve additional value from the core function of processing waste, and can help add value for the EfW plant operator as well as the HDEN ESCo and the Council.

- **Place Based Working**

3.3. This scheme is intended to be a low carbon enabling infrastructure for Huddersfield, the district's largest town. The relatively large urban area provides the justification for the scale of infrastructure for the HDEN. Other solutions to help them decarbonise will be more appropriate for other communities across the district. The Council has recently undertaken a Climate Change public survey exercise in order to gather views from residents This information will be used to help inform the design of other actions in order to work with Kirklees communities to achieve the Council's 'net zero' target.

- **Climate Change and Air Quality**

3.4. The HDEN is considered to be a key enabling infrastructure to help the district achieve the target of 'net zero' emissions by 2038. If approved and constructed the scheme is expected to achieve carbon emission savings and air quality improvements linked to the removal of existing natural gas-fired boiler plants at sites that will connect to the network.

3.5. Over the longer term, the scheme is considered to be a key enabling element to facilitate the decarbonisation of Huddersfield Town Centre, by providing energy delivery infrastructure that can



accommodate future low and zero-carbon sources of heat and power and deliver this efficiently around the town centre.

- **Improving outcomes for children**

3.6. The HDEN is infrastructure that will contribute towards energy resilience and security for Huddersfield Town Centre, whilst also being intended to deliver competitively-priced energy. The network is also designed to be able to grow and expand over time. At the time of writing, the cost of living is a significant concern across society, which in turn can impact upon outcomes for children. Through reducing dependency on fossil-fuel derived heating, the HDEN can be regarded as 'future-proofing' infrastructure that can help address the cost of living over the longer term. Children, alongside other groups can benefit from this.

- **Other (e.g. Legal/Financial or Human Resources)**

3.7. By its nature, the HDEN scheme, has significant Legal and Financial implications for the Council, in terms of the structures required to be set up for delivery, the relationship with the Council's Waste contract, and the significant Council borrowing required. In considering this report the Council must have regard to its public sector equality duty under section 149 of the Equalities Act 2010 and its fiduciary duty to council tax payers and the duty of best value under the Local Government Act 1999. It is also important to note that whilst intended primarily as a carbon reduction scheme, the project is also predicted by the business case to generate a return for the Council and is expected to achieve a positive Internal Rate of Return in excess of 6% over a 40 year period. Key implications from the Commercial and Financial Cases are included in this section of the report. It is also anticipated that there will be grant conditions for the Council to comply with.

### **Commercial Considerations for the Council**

3.8. The favoured option set out in the Commercial case identified as wholly-owned Special Purpose Vehicle (SPV) Energy Services Company (ESCO) set up to construct and operate the HDEN. The SPV will be a trading company with a separate legal identity from the council, notwithstanding that the Council will, be a shareholder. The company will need its own bank account and insurances such as employers liability, third party cover, Directors and Officers liability cover.

3.9. The SPV is proposed to be set up through powers granted to the Local Authority through Section 95 of the Local Government Act 2003 (this rationale is set out in Appendix K (Legal Compliance Check), and is proposed to take place during the Commercialisation stage. In line with Contract Procedure Rule 12.1, this is expected to require a further Cabinet approval following detailed evaluation by the Solicitor to the Council and the Chief Financial Officer

3.10. It is noted that as the sole owner of the ESCo, the Council will need to set up a 'HDEN Board' for the oversight of the company, and also to agree representation on the ESCo Board of Directors. This is proposed to be further developed during the subsequent Commercialisation stage of DEN development and agreed at the FBC stage.

3.11. The proposed approach to customer pricing for energy is set out in the Commercial case, with the aim of being lower cost to the consumer than the prevailing business-as-usual alternatives, in order to create an incentive for connection. This pricing strategy will be refined through the proposed alignment between the HDEN and Waste Contracts and finalised during the Commercialisation stage.

### **Procurement Route for Delivery of the HDEN**

3.12. The Commercial Case proposes a separate specific and compliant procurement exercise to procure the different contractual elements required for the ESCo to deliver the scheme. This includes Design, Build, Operate and Maintain (DBOM) considerations alongside Customer Service and Billing. Authorisation for this exercise is required as part of this approval, which is proposed

to be set up to complete at the point of the Council approving the FBC (i.e. at the completion of the Commercialisation stage of development), as follows:

- 3.13. The procurement approach is set out in section 3.6 of the Private Appendix (Commercial Case of the OBC) which sets out a single, Public Contracts Regulations (PCR) compliant procurement. The procurements will be carried out by the Council (and later novated to the SPV/ESCo) and also the SPV/ESCo directly. The proposed approach is to follow a “holistic” approach and all the procured services to fall under one regulation, the Public Contracts Regulations 2015 (PCR). Therefore, the procurement strategy will be structured to comply with PCR which not exclude from services procured in the future to fall under the Utilities Contracts Regulations 2016 (UCR) as required.
- 3.14. The final decision by the Council to proceed with the project will occur shortly before financial close of the procurement exercise. All of the core commercial contracts (including all those listed above) will be entered into at the same time (at financial close).

### **Financial Summary and Considerations for the Council**

- 3.15. Aside from the costs associated with the construction and delivery of the network, costs will also be incurred in order to undertake the Commercialisation stage of project development (i.e. to take the OBC and develop to the FBC stage). These costs are anticipated to be £1.21m, up to £1m of which could be accessed from a successful GHNF bid (NB. Commercialisation costs can be accessed via the GHNF as part of the 50% of project costs referred to above). This includes the provision of external specialist consultant support in order to progress to FBC, alongside additional Council Officer capacity for approximately two year to manage this stage of the scheme, recognising the increased complexity as the scheme moves closer to delivery.
- 3.16. The Private Appendix OBC Financial Case establishes and sets out the financial performance of the preferred option detail in the Economic Case and takes into account anticipated cashflow, financing and tax costs for the HDEN. Once these elements are taken into account, the Internal Rate of Return (over 40 years) is positive and in excess of 6%.
- 3.17. The Financial Case anticipates a successful Council bid to the Government’s Green Heat Network Fund (GHNF) in order to access up to 50% capital grant funding for eligible construction and delivery of the HDEN. Whilst the Financial case assumes a conservative assumption of a 40% successful bid to the GHNF, it is recommended that retrospective delegated authority is given to the Strategic Director in order to make a decision at the point of bidding for GHNF in order to maximise potential grant income balanced with a likely outcome of success. The remaining project capital requirements are anticipated to be achieved through Council borrowing with a nominal amount required for Council equity in the ESCo. This is required as consideration for the Council’s proposed 100% share ownership in the ESCo.
- 3.18. The funding requirements for the network are anticipated to be required in three tranches between 2025/26 and 2036/37 as set out in the Private Appendix (OBC Financial Case).
- 3.19. Capital borrowing is required from the Council in order to meet the scheme costs not covered by an anticipated grant application to the GHNF. This is set out in the Private Appendix (Financial Case) and is expected to take the form of a loan from the Council to the ESCo, which will be repaid via the return generated from the commercial activities (the sale of heat energy and use of system charge for electricity). The Financial Case has made relatively robust assumptions in relation to inflation, but it is recognised that this is a changing situation due to the external situation. The potential impacts of the inflationary environment will be kept under review with regard to the project costs.
- 3.20. The scheme as set out in the OBC is intended to generate revenues sufficient to repay the debt incurred by the Special Purpose Vehicle (i.e. the council borrowing). This is set out in more

detail Private Appendix OBC Financial Case (section 4.3) and also at Private Appendix OBC Appendix L & M. Potential adverse events that could have a detrimental financial impact on the scheme have been modelled as sensitivities at paragraph 4.3.7 (and Private Appendix OBC Appendix N) of the Financial Case. This section shows the impact of the different sensitivities considered most likely in comparison to the base case. This also includes certain positive event sensitivities (in finance terms) such as an increase in heat tariffs.

3.21. This also anticipates that an application to the GHNF needs to take place ahead of this Cabinet Decision under the authority of the Strategic Director, in order to meet the deadline for Round 2 of the GHNF, which closes on 26 August 2022.

3.22. Cabinet is asked to indicate their support for the HDEN scheme along with support for taking forward these outlined capital implications into the Council's Medium Term Financial Strategy at the next decision point. This will require a revision to the existing Council Capital Plan profile for the heat network (which assumes 100% grant funding) to take into account the above borrowing requirements and split between anticipated grant funding and council borrowing.

### **Alignment with the Waste and EfW Contract**

3.23. As described earlier, the interrelationship with the Waste/EfW Contract procurement is a key interdependency for this project, with this procurement process commencing in Autumn 2022. As such, preparatory work around the alignment of these two schemes needs to be substantively complete by the time this Cabinet Decision take place, which requires this work package to be brought forward from the Commercialisation stage now taking place pre-OBC approval in order to take place in Summer-Autumn 2022.

3.24. Through consultation with Portfolio holders, a further £200k of Council borrowing has been identified and agreed in order to undertake this 'bridging' and early commercialisation work ahead of the OBC approval in order to avoid any disruption to the EfW/Waste Procurement process.

### **Do you need an Integrated Impact Assessment (IIA)?**

3.25. An Integrated Impact Assessment for this proposal has been completed and is included at appendix 2.

## **4. Consultees and their opinions**

4.1. The Council's Head of Risk has been a member of the HDEN Internal Board and a regular consultee through the OBC process. They have made the following comments for this report:

*"Although the project demonstrates a potentially viable business case it is dependent on a few assumptions which may or may not be achieved.*

*The project*

- Is dependent on the continued operation of the waste to energy plant (and the cooperation of its operator).*
- Is only viable because of the private wire electricity arrangements (which depends on the operator of the waste to energy plant).*
- Viability is dependent on the other proposed partners being willing to join on the commercial terms proposed, or terms that are very similar.*

*The projected rates of return are lower than would be sought by a commercial operator. Any rise in construction costs would impact on viability. Conversely, rising energy prices may improve viability.*

*Overall the project can not be predicted as certainly risk free, and the council may be constrained in future choices (beyond the full business case), by grant obligations, and being project lender."*

4.2. The Council's Head of Commercial Services has been a member of the HDEN Internal Board and a regular consultee through the OBC process. They have made the following comments for this report:

*"The IRR is above 6% and the economic viability of the project is dependent on the private wire network. The project's viability is sensitive to changes in customer demand and pricing, and any negative changes to the IRR will need to be considered further. The Waste Contract and DEN procurement need to be aligned and the overall cost/benefits/risk/operational implications need to be considered together rather than singularly"*

4.3. Representatives from the Council's Waste Services have attended the HDEN Internal Board and helped identify the key alignments required alongside the procurement of the Council's Waste contract. The Head of Operational Services has provided the following comments for this report:

*"The HDEN provides an exciting opportunity to help achieve the aspirations of the Council's Waste Strategy in relation to helping to achieve the Council's 'net zero' carbon emissions target. The HDEN does present some challenges and complexities to address for the Waste contract process, but by working closely together on the alignment of the two schemes, these can be addressed. The ultimate results are considered beneficial both in terms of energy efficiency and carbon reduction as well as achieving additional benefits via the Council's Waste Contract."*

4.4. By its nature, the HDEN has a wide range of stakeholders, both externally and internally. In development of the OBC, the HDEN project team has been supported by the following internal consultees and stakeholders:

- Regular briefings with Portfolio Holders for Environment, Culture & Greener Kirklees, plus Portfolio holders for the Corporate and Regeneration portfolios where necessary.
- Internal Board representation including Highways, Waste Services, Corporate Landlord Technical Services, Energy, Risk, Legal, Finance, Procurement and Business & Skills
- Planning Service informal consultation has taken
- Asset Governance Board to update on the scope of the scheme and achieve permissions for the use of the 37 Old Leeds Road as the location for the HDEN Energy Centre.
- Capital Governance Board in order to consider the capital implications of the proposal
- Project teams engaged with Huddersfield Blueprint and Highways improvements schemes across the town centre area

Ahead of this Cabinet decision, it is intended to engage and brief the following Member groups:

- Pre-Cabinet Decision Economy & Neighbourhoods Scrutiny Panel (30<sup>th</sup> August 2022)

## 5. Next steps and timelines

### Scheme Timescales

Task Name	Date
Green Heat Network Fund application submission	August 2022
Alignment of EfW Contract and HDEN Proposals	October 2022
Commercialisation stage (OBC to FBC) workstreams	October 2022-January 2024
Full Business Case Approval	January 2024-March 2024
Construction of the HDEN	April 2024-March 2025

5.1. Concurrently with this decision process, the workstream will be undertaken:

- Alignment of the HDEN process with the Council's Waste/EfW Contract procurement process in order to achieve mutually beneficial outcomes for both, ahead of the formal EfW procurement process commencing in November 2022.

- 5.2. Following this Cabinet decision, and anticipating a successful outcome of the GHNF bid, the Council will commence the commercialisation stage of the project to develop the OBC to FBC stage.
- 5.3. The timescales set out in this section 5 replace those set out in the Private Appendix (OBC Management Case).

## 6. Officer recommendations and reasons

1. That the results of the Outline Business Case dated 30 March 2022 are noted, along with the considerations relating to the Green Heat Network Fund application timing (set out at section 2.38 and 2.42 of this report).

*Reason: To allow Cabinet to recognise that the Outline Business Case has identified that a viable and attractive heat network opportunity exists for Huddersfield as detailed in this report and the OBC. Positive results include the delivery of significant carbon savings derived from heat provided by the network established alongside an economically viable network that can operate on a commercial basis. This should be considered alongside the risks highlighted earlier in this report.*

2. That Cabinet agrees the proposed commercial delivery model, procurement and funding strategy up to Full Business Case as set out in the Outline Business Case

*Reason: To recognise and accept the findings of the Outline Business Case and accept the strategy set out to progress the scheme to the next key milestone, Full Business Case stage.*

3. That Cabinet delegate authority to the Strategic Director for Environment & Climate Change to apply for (in retrospect) and to accept in principle external funding of the Huddersfield District Energy Network (HDEN) from the Green Heat Networks Fund (GHNF) and other appropriate sources of external funding necessary to progress the project to Full Business Case, in accordance with the Council's Financial Procedure Rule 22.

*Reason: To anticipate a successful outcome from an application to the GHNF and to anticipate any further sources of appropriate external funds that may become available. These funding opportunities are normally constrained by challenging bid timelines and delegating authority to the Strategic Director will allow these opportunities to be progressed without delays to the HDEN timelines.*

4. To delegate authority to the Strategic Director for Environment & Climate Change in consultation with the Portfolio Holders for Environment and Culture & Greener Kirklees in order to progress the next steps set out in the Commercial and Management cases, specifically:
  - a. Detailed assessment of the Energy from Waste (EfW) power export value
  - b. Alignment with procurement of Waste Services Contract (including the EfW) to agree the supply of heat and power
  - c. To agree the compliant procurement route, prepare and undertake the procurement exercise for the delivery of the HDEN as set out in the Commercial Case of the OBC
  - d. Customer Acquisition - preparation and agreement in principle of heat and electricity supply arrangements with District Energy Network customers (including Council-owned sites)
  - e. Securing funding for the HDEN Commercialisation stage
  - f. Procurement and Operation of HDEN assets
  - g. HDEN operational arrangements
  - h. Heat Offtake agreement between the HDEN and EfW

- i. to prepare and submit a full planning application(s) for the construction of the proposed Energy Centre and the other elements of the HDEN falling within the scope of Planning Permission regulations.
- j. Any further steps to progress the scheme from Outline Business Case to Full Business Case, which could reasonably be anticipated

*Reason: Progressing the scheme to Full Business Case will require a number of separate commercial negotiations and interrelated work streams. This delegates authority to the Strategic Director in order for the project to be delivered as envisaged, up to the FBC stage, whilst also being able to respond and adapt to the negotiations and changing circumstances (recognising that the nature of the feasibility process is that sometimes minor alterations are required in order to keep the project on track, possibly in response to unexpected or unanticipated events) that do not substantively change the nature of the scheme.*

5. That Cabinet delegate authority to the Strategic Director – Environment & Climate Change in consultation with the portfolio holder in order to deliver any minor alterations to what is set out in the Outline Business Case and which are in the interests of the Council to ensure that the project is delivered up to Full Business Case completion. Significant alterations to the OBC will be referred back to Cabinet.

*Reason: The nature of the feasibility process is that sometimes minor alterations are required in order to keep the project on track, possibly in response to unexpected or unanticipated events. This delegates authority to the Strategic Director in order for the project to be delivered as envisaged, up to outline business case stage.*

6. To note the funding requirements for the HDEN as set out in the Financial Case of the OBC and for Cabinet to agree to support the Council investment and borrowing requirements as set out in the Financial and Management Cases (and summarised at sections 3.15 to 3.22 above) in conjunction with (and anticipating) a successful application to the Green Heat Networks Fund.

*Reason: To provide clarity and indicate Cabinet's support for the capital costs associated with delivering the network and to provide certainty to allow the HDEN to progress to FBC and to seek to access external sources of funding. To ensure that there will be sufficient resources in place to undertake the development of the project to FBC stage.*

7. To delegate to the Strategic Director for Environment & Climate Change all necessary preparations to set up the Special Purpose Vehicle/ESCo so that a further report is brought to Cabinet following the detailed evaluation by the Solicitor to the Council and the Chief Financial Officer to agree the establishment of the Special Purpose Vehicle for the Huddersfield District Energy Network.

*Reason: To ensure compliance with the Council's Contract Procedure Rule 12.1 governing the establishment of Special Purpose Vehicles. This will take place before the anticipated Cabinet consideration of the Full Business Case*

8. That a further report is brought to Cabinet following the completion of the Commercialisation stage of work, in order to consider the resulting Full Business Case for the HDEN and whether to progress the scheme to construction and delivery.

*Reason: This report is the decision point to progress to the Commercialisation stage of HDEN development, which will progress the OBC to FBC status. The next decision point for Cabinet will be to present the FBC to cabinet in order to consider whether the scheme should progress to construction and delivery.*

9. For Cabinet to authorise the Service Director – Legal, Governance and Commissioning to sign any legal agreements, documents or instruments which the Council is required to enter into up to Full Business Case stage. This does not extend to the transaction documents which will be entered into at financial close for which specific authority will be sought as part of the approval of the Final Business case .

*Reason: The Commercialisation stage of HDEN development will require legal and commercial agreements setting up between the Council and the parties as set out in the Commercial Case.*

10. For Cabinet to authorise the Service Director – Development to appropriate the Council-owned land at 37 Old Leeds Road for the purposes of the proposed Energy Centre for the Huddersfield District Energy Network.

*Reason: Following a recommendation from the Council's Asset Governance Board in September 2021, to formalise and agree the use of the site for the purpose of the HDEN's Energy Centre.*

## **7. Cabinet Portfolio Holder's recommendations**

To add Portfolio Recommendations (Environment, Culture and Greener Kirklees, Corporate and Resources)

**8. Contact officer**

John Atkinson, Group Leader – Energy & Climate Change  
[John.atkinson@kirklees.gov.uk](mailto:John.atkinson@kirklees.gov.uk)  
01484 221000

**9. Background Papers and History of Decisions**

12<sup>th</sup> November 2019 - Kirklees Climate Emergency Declaration and the Kirklees Air Quality Strategy and Five Year Air Quality Action Plan

16<sup>th</sup> February 2021 - Huddersfield District Heat & Energy Network Cabinet Report

**10. Service Director responsible**

Katherine Armitage, Service Director for Environmental Strategy and Climate Change

**11. Appendices**

1. HDEN Letter of Support for the HDEN from the BEIS Heat Network Delivery Unit Head of Commercial & Investment
2. HDEN Integrated Impact Assessment

Private Appendices:

3. HDEN Outline Business Case Executive Summary (Exemption Clause 3)
4. HDEN Outline Business Case – Full Report (Exemption Clause 3)
5. HDEN OBC Full Report Appendix K – Legal Compliance Check (Exemption Clause 5)