



ADUR & WORTHING
C O U N C I L S

Joint Strategic Committee
16 March 2022
Agenda Item 11

Key Decision [~~Yes~~/No]

Ward(s) Affected:

Carbon Neutral 2030: Worthing Heat Network Progress Update

Report by the Director for Digital, Sustainability & Resources

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Executive Summary

1. Purpose

- 1.1. To update Members on work undertaken since September 2021 which has focused on developing the procurement documentation required to appoint a concessionaire to fund, design, build, operate and maintain a new, low carbon heat network within Worthing Town Centre.
- 1.2. Heat Network Investment Programme (HNIP) funding was awarded to the council in autumn 2021 and Joint Strategic Committee delegated authority to the Director for Digital, Sustainability & Resources to enter into any contracts for expenditure of this funding to progress the Heat Network Delivery
- 1.3. The procurement documentation has been developed with significant support from external technical, commercial and legal advisors and presents bidders with key requirements that must be met by the future network operator. It also sets out obligations on customers of the network, including parameters of future Heat Supply and Connection Agreements to which the council will be party should a

concessionaire be appointed. These are explained further in Section 6

- 1.4. The procurement documentation is now ready for publication, ahead of the next steps set out at Section 5.9 Members' continued endorsement is sought prior to the advertisement of the tender opportunity.

2. Recommendations

Members are recommended to:

- 2.1. Note the progress report below
- 2.2. Approve the publication of the procurement documentation, as set out in Section 5.
- 2.3. Note the indicative Heat Supply and Connection Agreement parameters and reaffirm the council's commitment to executing these documents upon completion of the procurement process.
- 2.4. Accept a further update report at JSC prior to the appointment of the concessionaire, to include delegation of authority to the Director for Digital, Sustainability & Resources to enter into Heat Supply and Connection Agreements with the appointed concessionaire.

3. Context

- 3.1. The opportunity for a heat network (HN) on the Worthing Civic Quarter Site was identified by the council's Carbon Neutral Plan as the most economic and efficient way to reduce carbon emissions from heating in key council owned civic buildings in Worthing. The Plan identified that the decarbonisation of heat is a key challenge in achieving the councils' 2030 carbon neutral target.
- 3.2. The Plan identified that the Worthing Civic Quarter offered an ideal opportunity for a heat network and, following developments previously discussed in the March 2021 and October 2021 JSC reports, the project is now to deliver a Heat Network initially focusing on the public sector estate

and new developments in Worthing Town Centre, with significant opportunity for growth in due course.

- 3.3. The investigation of this opportunity is a commitment under Platforms for Our Places and SustainableAW 2020-23. The project is referred to in the [Greater Brighton Energy Plan 10 Pledges](#) and in the Coast2Capital Local Enterprise Partnership's Energy Strategy Action Plan: [Energy South2East](#).
- 3.4. The council has received a significant contribution of finance and expertise from the government to develop the Worthing Heat Network project. This includes:
 - The Head of Finance and Commercial for Heat Networks from the Heat Network Development Unit, (HNDU) providing commercial and technical support to the project, including drafting of the Outline Business Case.
 - Four rounds of HNDU funding, totalling £295,912 to undertake building surveys (AECOM); appoint project management support (West Sussex Estates Partnership); and commission consultancy services (1Energy and Womble Bond Dickinson) that have allowed the project team to develop an Outline Business Case and submit a funding bid to HNIP.
 - Additional funding from the Low Carbon Skills Fund (£24,800) and Greater South East Energy Hub (£38,160) to conduct further technical assessment, including a study investigating the viability of utilising the mains sewer to provide heat to the network.
 - As reported at JSC in October 2021, £5.383m of Heat Network Investment Programme (HNIP) funding, consisting of:
 - £950,000 grant funding for Commercialisation
 - £3.158m grant monies for Construction; plus
 - £1.275m loan funding (at 0.01% interest) for construction.

4. Worthing Heat Network

- 4.1. The Worthing Heat Network proposed route and connections is illustrated below:



- 4.2. The feasibility study proposed an initial 20 connections. 15 of which are public sector buildings; there are 6 building owners (4 in the public sector); 10 are new development sites; and of the 20 connections, 9 are WBC owned buildings or sites. The small number of key off-takers (6) gives the HN a high potential for successful implementation. There are 4 large scale mixed use planned developments on the proposed network. Planning policy is in place through the Draft Worthing Local Plan, to require new development to connect to the heat network.
- 4.3. The analysis conducted by consultants RECIRC ENERGY and AECOM has confirmed that it is possible to supply the vast majority of the heat demand for the network by utilising waste heat from the sewer.
- 4.4. It is proposed that new backup/peaking gas plant will be installed in Worthing Town Hall. It is expected that this will only meet about 10-15% of heating demand.
- 4.5. As reported to JSC previously, the following HNDU and HNIP funding has been secured to assist in the development of the project beyond 'feasibility' stage

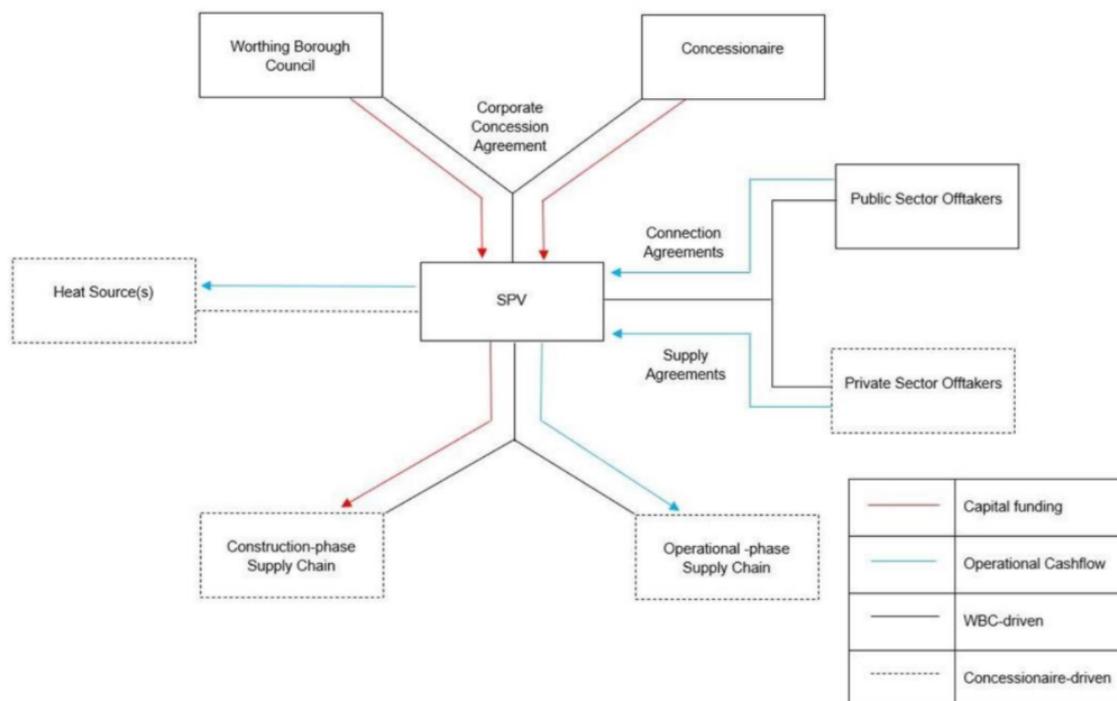
Amount	Type	Stage	Notes
£150,905	Grant	Detailed Project Development	HNDU funding, contingent on WBC match funding of £56,595 (grant funding totals 72.7% of budget)
£950,000	Grant	Commercialisation	
£3.158m	Grant	Construction	To be on-granted to concessionaire partner
£1.275m	Loan	Construction	To be on-loaned to concessionaire partner. The loan has a 0.01% interest rate attached to it.

Table 1 - summary of HNIP/ HNDU funding offers

- 4.6. The Commercialisation stage has been in progress since Autumn, with partners appointed to cover the following specialisms:
- Project Management
 - Stakeholder Engagement
 - Technical
 - Commercial & Finance
 - Legal & Procurement support
- 4.7. The remainder of this report sets out progress in the Commercialisation Stage made to date and to outline the next steps for the council, specifically the:
- Procurement exercise
 - Heat Supply and Connection Agreements

5. Procurement

- 5.1. The Council and its advisors will be procuring an Output Specification for the Worthing Heat Network concession opportunity. This gives the market significant freedom in creating innovative solutions that meet the Council's requirements.
- 5.2. Simultaneously, the opportunity will also allow the council and partners the opportunity to procure its heat supply for certain buildings within the same procurement exercise.
- 5.3. As such, there will be multiple contracts created as a result of this procurement, which will be conducted under the Public Procurement Regulations. These are summarised in the figure below:



- 5.4. The principal aim of the exercise is for the Council to sign a Corporate Concession Agreement with the successful tenderer based on the most economically advantageous bidder
- 5.5. The Concessionaire will then establish an Special Purpose Vehicle (SPV), to which the Council will on-grant and on-loan the remaining HNIP funding. These agreements will be back-to-back with the HNIP-WBC funding agreements to minimise risk to the council.
- 5.6. The Council and all other offtakers participating in the initial procurement will also need to sign two further agreements with the SPV:
- The Connection Agreement - between the SPV and the freeholder, which details requirements for the initial heat network connection
 - The Heat Supply Agreement - between the SPV and the leaseholder/occupant, which details ongoing obligations relating to heat supply. This will essentially replace the gas supply contract that most offtakers currently have.
- 5.7. The SPV will also need to contract with Southern Water to access and extract heat from the sewer (separate from this procurement exercise), as well as multiple subcontractors to ensure the smooth operation of the heat network.
- 5.8. Members should note that it is not a requirement of the procurement that the winning bidder utilises sewer heat at all - the scenario developed in detail by the project team to date is to be used as a reference and minimum requirement. As such, if the bidder can demonstrate that an alternative

solution is at least as advantageous than utilising the sewer, this is to be deemed acceptable to the council.

5.9. The provisional timeline for the procurement exercise is presented below.

Stage	Dates
JSC pre-procurement	15 March 2022
Launch Selection Questionnaire	By 31 March 2022
Selection Questionnaire responses due	3 May 2022
Evaluation of SQ responses	4 May - 31 May 2022
Issue Invitation to Participate in Dialogue	1 June 2022
Dialogue period	2 June 2022 - 9 September 2022
Interim submissions from bidders	13 July 2022
Final submissions received	7 October 2022
Evaluation of final submissions	8 October - 4 November 2022
Standstill period	5 November - 14 November 2022
Notification of preferred bidder	15 November 2022
Contract negotiations, including attendance at JSC to confirm appointment	16 November 2022 - 28 February 2023

5.10. As shown, JSC will be consulted prior to the formal appointment of the Concessionaire and signing of the Concessionaire Agreement and before signing the Connection Agreements and Heat Supply Agreements for WBC occupied/owned buildings.

5.11. Members should note that the above programme is provisional. It may be necessary to amend the timetable to, in particular, accommodate delays in Governance procedures from public sector offtaker partners.

6. Heat Supply and Connection Agreements

6.1. As noted above, offtakers will be obliged to enter into Heat Supply and Connection Agreements with the SPV. For non-phase 1 buildings, the SPV will be able to negotiate its own terms and conditions, however the procurement documentation proposes certain standard terms and conditions to which bidders are asked to adhere. Amending these terms and conditions will result in a lower score for the bidder, although unless the evaluation panel

deems these amendments to be wholly unacceptable, it is unlikely that amendments will prohibit a bidder from winning the contract.

6.2. Key items within the terms and conditions of the Connection Agreement are as follows:

Connection Agreement

Obligations on Heat Network Operator	Obligations on Customer
<p>Undertake an assessment of the connection based on the customer demand requirements</p> <p>Design, build then own and operate the connection to the customer premises including a substation located on the customer site.</p> <p>Commission the heat connection</p> <p>Maintain the connection to ensure heat supply</p>	<p>Provide Worthing HeatCo with its demand and capacity requirements</p> <p>Provide access for the installation and subsequent operations and grant property rights</p> <p>Be responsible for any customer side heating system changes necessary for compatibility</p> <p>Pay a connection fee</p> <p>Enter into a supply agreement with Worthing HeatCo</p>

6.3. Key items within the terms and conditions of the Heat Supply Agreement are as follows:

Heat Supply Agreement

Obligations on Heat Network Operator	Obligations on Customer
<p>Supply heat at an agreed temperature up to the capacity installed</p> <p>Ensure heat is available at all times</p> <p>Accurately meter heat usage and bill monthly for both heat use and availability</p> <p>Ensure all heat charges are competitive against an alternative low carbon heat source expected to be an individual air source heat pump</p>	<p>Provide access for the maintenance of the network connection and substation</p> <p>Pay heat charges</p> <p>Maintain the water quality on the customer side of the heat substation</p> <p>Undertake not to install any alternative heating system unless, as in the case of the hospital, it is agreed that on site back up boilers can be retained.</p>

- 6.4. The Connection Agreement will be open ended and have no term but the supply agreement is envisaged to be set with an initial 10 year term with roll over provisions.
- 6.5. The final terms and conditions the council will be signing up to will be presented to JSC prior to the appointment of the concessionaire.

7. Issues for consideration

- 7.1. The boilers at Portland House and Worthing Town Hall are at their end of life and replacement is needed. Town Hall boilers also currently supply heat to the Assembly Hall. Budget provision has been allocated in the capital programme for boiler replacement, however, replacement with gas boilers will not meet the council's carbon neutral target.
- 7.2. Replacement of gas boilers with standalone air source heat pumps (ASHPs) in each building is a potential alternative, but would be more costly both in terms of capital and revenue costs. Delivering building-level solutions would also negate the opportunity for the heat network to unlock wider decarbonisation opportunities for Worthing as a whole.
- 7.3. If the councils do not progress plans for a heat network, the councils will forgo the opportunity to show leadership and offer other large scale and public sector heat consumers and developers the opportunity to collaborate on a project to decarbonise heat at scale in Worthing.
- 7.4. Public Sector Decarbonisation Scheme funding, of which Adur (£1.7m) and Worthing (£0.6m), have both made previous successful bids, is to be sought to assist in the funding of the capital works required to adapt the existing buildings to enable connection to the heat network. Officers will be preparing bids for submission this summer, although it has not yet been confirmed when future phases will open. Some match funding requirement should be expected.

8. Engagement and Communication

- 8.1. In order to present the most attractive opportunity to the market (and therefore obtain the most competitive tender returns) further engagement with external stakeholders has been undertaken.
- 8.2. In particular, significant progress has been made with the NHS and WSCC. Officers are now in regular dialogue to assist these bodies in the development of their own business cases and it is hoped both will form part of the evaluation panel that will decide the successful bidder.

- 8.3. Finance, Legal, Democratic Services, Estates, Procurement, Facilities, Planning, and Place & Economy teams have provided guidance to the project and received updates through attendance at regular meetings.
- 8.4. The Worthing Planning team has developed new policy to drive the successful delivery of a heat network for Worthing and requirements have been added to Policy DM17 of the Draft Submission Worthing Local Plan to require connection to the Worthing Heat Network or to ensure new development is 'connection ready' in heat network opportunity areas.
- 8.5. Significant input from BEIS and HNDU has been received. BEIS/HNDU consider this scheme to be of national importance for two reasons:
 - Its use of waste heat from sewers as a primary heat source
 - Its intention to appoint an ongoing concessionaire to run the network
- 8.6. Regular stakeholder updates continue to be held with offtakers: Worthing Theatres and Museums, West Sussex County Council, the Ministry of Justice, Worthing Hospital (University Hospitals Sussex NHS Foundation Trust) and developers or their consultants for the sites at Worthing Gasworks, Union Place and the WICC.
- 8.7. Southern Water, who own the sewer proposed as the primary heat supply point for the network, have assisted in the development of a draft Use of Sewer Agreement in preparation for the concessionaire partner to sign.
- 8.8. The County Highways Authority have been consulted on Highways consideration and future Public Realm projects considered for the phasing of the network.
- 8.9. The Council has also engaged with BEIS regarding future Heat Network Zoning propositions, whereby heat network operators within centrally-designated Heat Network Zones would receive statutory undertaking rights equivalent to those employed by current utilities firms (SGN, UKPN, Southern Water etc). If enacted by Government, it is expected that Central Worthing will form a Heat Network Zone.
- 8.10. Potential private sector partners have been engaged through three successful Investor Days. The most recent, in April, was attended by 60 personnel from potential bidders and the council have had individual meetings with multiple potential network operators.

9. Financial Implications

- 9.1. The Council has now received overall HNIP funding of £5.383m of which £0.95m will relate to the commercialisation phase of the project. In addition,

the Councils have received £150,900 from HDNU to support the initial phases of the project,

9.2. The funding for the commercialisation phase of the project is currently being spent to progress the procurement on a range of specialist advisers. However the funding received from BEIS towards the delivery of the network is currently being held on the balance sheet pending the successful tender of the project.

9.3. **Loan from BEIS:**

9.3.1 Members are reminded that the funding package includes a fixed rate loan of £1.275m. This loan is for 25 years with an interest rate of 0.01%. Until such time as the loan is passported onto the supplier of the heat network (the supplier), the Council will have to fund any interest payments which will be equivalent to £130 per year which can be absorbed by the Treasury Management interest budget.

9.3.2 In addition, under the draft terms of the loan, the Council is obliged to repay principal of £51,000 per year from June 2025 although this principal payment is not a cost to the revenue budget until such time as the loan is advanced to the supplier; at which time we will be required to set aside from the revenue budget an annual allowance for the repayment of debt through Minimum Revenue Provision (MRP) policy. Our current MRP policy allows us to fund the MRP from the amount repaid by the supplier each year for loans given.

9.3.3 It is intended to replicate the terms of the loan as part of the commercial terms of any contract with the supplier of the heat network and ensure that the revenue cost to the Council of the loan is fully reimbursed on an annual basis. However, any sums paid in the interim will have to be funded by the Council until a supplier is in place and has drawn down the loan although it is anticipated that the loan will be advanced before any principal repayment is due to BEIS.

9.3.4 As part of determining the commercial terms for the loan, subsidy control advice will be required regarding the interest rate proposed to be charged. If the subsidy control rules do apply to the interest rate of the loan, then permission will need to be sought from the BEIS to charge a higher rate of interest. Under the terms of the loan, the Council cannot profit from the loan, any surplus would need to be returned to BEIS.

9.3.5 The loan can only be utilised to fund the construction of the heat network and not applied for any other purpose,

9.3.6 The loan can be repaid to BEIS at any time without any significant penalty. This means that should the scheme for any reason not proceed or any

potential supplier not require the loan, that the Council can repay the loan provided that 10 days notice is given.

9.4. Accounting issues:

- 9.4.1 Under the proposed agreement, a special purpose vehicle (SPV) will be created. The Council will own one 'golden' share in the Company. There is no intention for the Council to be involved with the running of the Company, receive any dividends or profit share, or have any voting rights on the board of the company; nevertheless within the terms of the agreement there will be obligations relating to the company designed to protect the Council's long-term interests.
- 9.4.2 Under the CIPFA code of practice, the Council will be obliged to disclose within the accounts our relationship with the SPV. However, the requirement to consolidate the accounts of the SPV into the Council's accounts is determined by whether the Council has a controlling interest in the SPV and is triggered if and only if the Council has all the following:
- a) power over the SPV
 - b) exposure, or rights, to variable returns from its involvement with the SPV, and
 - c) the ability to use its power over the SPV to affect the amount of the investor's returns.
- 9.4.3 Whilst officers believe that there is no need to consolidate the Company into the accounts of Worthing Borough Council, given the complex nature of the proposed agreement, external advice will be sought to confirm the Council's view.
- 9.4.4 There is one further technical accounting consideration associated with the project, which will not affect the revenue cost of the project but which may impact the balance sheet accounting, IFRIC 12 - Service Concession Arrangements
- 9.4.5 IFRIC 12 is only applicable to the Councils if the contractor (operator) is providing public services related to the service concession asset on behalf of the local authority. Typically these arrangements involve a private sector entity (the operator) constructing or upgrading (adding to) assets used in the provision of a public service, and operating and maintaining those assets for a specified period of time (e.g a school or a hospital). The provision of a heat network is likely to be outside of the definition of a service provided to the public, although technical advice will be sought on this matter once the draft concession agreement has been finalised.

- 9.4.6 This accounting standard may require the Council to recognise the heat network as an asset with an associated liability on the balance sheet.
- 9.4.7 With respect to the accounting treatment within the Council's accounts, the key matter will be whether:
- a) the Council controls or regulates what services the operator must provide with the asset, to whom it must provide them, and at what price; and
 - b) the Council controls – through ownership, beneficial entitlement or otherwise –any significant residual interest in the asset at the end of the term of the arrangement.
- 9.4.8 Whilst the accounting standard may require the Council to depreciate this asset for the purposes of the statement of accounts, the statutory framework for local authority accounting would see this removed and replaced with the contractual costs.

10. Legal Implications

- 10.1 Section 1 of the Localism Act 2011 empowers the Council to do anything an individual can do apart from that which is specifically prohibited by pre-existing legislation.
- 10.2 The procurement process for the Concessionaire to deliver the Construction Phase, the Council must ensure:-
- The project is compliant with the Public Contract Regulations 2015 and/or the Public Concession Contracts Regulations 2016;
 - That the project does not infringe the rules relating to Subsidies detailed in Article 3 of the Trade and Cooperation Agreement 2020.
 - That the procurement documents reserve the right to withdraw or abandon the tender process prior to contract award without cost to the Council if authority from Members to proceed with the final Business Case and Construction Phase is not received.
- 10.3 Section 1 of The Local Government (Contracts) Act 1997 provides that every statutory provision conferring or imposing a function on a local authority confers the powers on the local authority to enter into a contract with another person for the provision or making available of assets or services, or both (whether or not together with goods) for the purposes of, or in connection with, the discharge of the function by the local authority.

- 10.5 In any contractual arrangement with the Heat Network Provider the Council must ensure that the Provider is bound to be fully compliant with the HNIP Funding Terms and Conditions, and that appropriate indemnities are in place in favour of the Council for any potential breach of the funding terms, by the Provider.
- 10.6 The Climate Change Act 2008 (as amended in 2019) is the basis for the UK's approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and other greenhouse gases are reduced and that climate change risks are prepared for, to achieve net zero carbon emissions by 2050.

Background Papers

- [JSC/47/21-22 Carbon Neutral 2030: Worthing Heat Network: progress update](#)
- [JSC/128/20-21 Carbon Neutral 2030 - Worthing Heat Network](#)
- [Worthing Civic Quarter Heat Network Feasibility Report](#) (AECOM 2020)
- [Worthing Heat Mapping and Masterplanning Study](#) (AECOM 2020)
- BEIS [Heat Network Investment Programme](#)

Sustainability & Risk Assessment

1. Economic

- The Heat Network Study seeks to find an economic pathway to decarbonise heat in Worthing. Transition to a low carbon economy is vital to provide future energy systems resilience, and to address and reduce potential impacts of climate change

2. Social

2.1 Social Value

- By securing affordable, low carbon energy into the future, the councils protect budgets from future energy price rises, drawing less budget into council operational costs away from services delivery that benefit local communities.

2.2 Equality Issues

- The impacts of climate change are predicted to impact on all communities, but the greatest impact is predicted to impact the most vulnerable communities. It is imperative that all is done to mitigate climate change. A requirement for the WHN to operate under the Heat Trust Scheme will ensure customer service standards are upheld.

2.3 Community Safety Issues (Section 17)

- Matter considered and no issues identified.

2.4 Human Rights Issues

The impacts of climate change are predicted to impact on all communities, but the greatest impact is predicted to impact the most vulnerable communities. It is imperative that all is done to mitigate climate change.

3. Environmental

- The key driver for the Councils' Climate Emergency Declaration and commitment towards becoming carbon neutral by 2030, is to avert the predicted catastrophic impacts of climate change on the environment, economy and communities. The proposed WHN would operate with low local emissions with air quality impacts resulting from the SSHP compared with heating from gas consumption and emissions from gas fired boilers

4. Governance

- The investigation of WHN is a commitment under Platforms for Our Places and SustainableAW 2020-23. The project is referred to in the Draft Greater Brighton Energy Plan 10 Pledges and in the Coast2Capital Local Enterprise Partnership's Energy Strategy Action Plan: Energy South2East.