



ADUR & WORTHING COUNCILS

Joint Strategic Committee
7 October 2021
Agenda Item 8

Key Decision: Yes

Ward(s) Affected:

Carbon Neutral 2030: Worthing Heat Network: progress update

Report by the Director for Digital, Sustainability and Resources

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Executive Summary

1. Purpose

1.1. This report sets out the progress made since March 2021 to deliver a flagship heat decarbonisation scheme in the centre of Worthing. The proposal will enable 8 council-owned buildings, multiple other public sector buildings (WSCC, MoJ, NHS and Sussex Police) along with major development sites to switch to very low-carbon heat in a cost effective manner.

1.2. The report updates members that the funding application to the Heat Network Investment Programme (HNIP), submitted following the Joint Strategic Committee meeting in March, was successful and that council has been awarded the following amounts:

- £950,000 grant funding for Commercialisation
- £3.158m grant monies for Construction; plus
- £1.275m loan funding (at 0.01% interest) for construction.

Delegated Authority was given to the Director for Digital, Sustainability & Resources to accept this funding in March 2021. Officers are currently working on finalising the Grant and Loan agreements ahead of officially accepting the award and drawing down the commercialisation funding.

- 1.3. The proposed next steps for this project are set out in the report at Section 5.13. Members' continued endorsement is sought on this approach, ahead of a presentation of a further report to Members on conclusion of the procurement process.

2. Recommendations

Members are recommended to:

- 2.1. Note the receipt of funding under a Grant Funding Agreement from HNIP, totalling £950,000 for the Commercialisation Phase of the Heat Network and, subject to Conditions set by HNIP being met during the Commercialisation phase, approve the further receipt of:
 - £3.158m grant monies for Construction; plus
 - £1.275m loan funding (at 0.01% interest) for construction.
- 2.2. To authorise the Director for Digital and Resources to enter into the HNIP Funding Agreements.
- 2.3. Note and endorse the next steps for the Worthing Heat Network;
- 2.4. Approve an amendment of the 2021/22 revenue budget by £950,000 to fund the commercialisation element of the project.
- 2.5. Approve the amendment of the 2022/23 capital programme for a contribution of £4.433m towards the construction of a heat network.
- 2.6. To authorise the Director for Digital Sustainability and Resources to enter into any contracts for expenditure of HNIP funding to progress the two phases of the Heat Network delivery.
- 2.7. To accept a further updating report at JSC prior to the commencement of the procurement process.

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 as emissions from gas consumed in buildings is responsible for approximately one-third of the councils' footprint.

- 3.2. The Plan identified that the Worthing Civic Quarter offered an ideal opportunity for a heat network as it accommodates 5 large existing civic buildings, 3 owned by Worthing Borough Council (WBC) and the others by the Ministry of Justice and West Sussex County Council, as well as a planned new health development, the WICC, being delivered by WBC. This could quickly and economically progress the decarbonisation of the council buildings but also the entire Civic Quarter if connected to low carbon heat generation. Discussions have since moved beyond the Civic Quarter to where a Worthing Heat Network for the town centre is the preferred option as discussed in detail in Section 4 and Appendix 1 of the [March 2021 JSC report](#).
- 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 Government's [Clean Growth Strategy](#) identifies the decarbonisation of heat as a key policy strand, with 18% of UK heat predicted to come from heat networks by 2050. As such, the Government has:
- Committed to phase out fossil fuel heating, banning new gas boilers in new homes from 2023 and in new non-residential buildings from the mid 2030s
 - Set up, within BEIS, the Heat Networks Delivery Unit (HNDU) to provide grant funding and guidance to local authorities to support heat network deployment in the UK
 - Established through BEIS the Heat networks Investment Programme (HNIP), with a budget of £320m to fund heat network commercialisation and construction; to increase the number of heat networks buildings; deliver carbon savings; and create a sustainable UK heat network market.
 - Established a new, £270m [Green Heat Networks Fund](#) (GHNF) to commercialise low carbon heat networks, to be launched in 2022.
- 3.5. 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 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.

4. Worthing Heat Network

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



4.2. The WHN consists of 28 connections of which 18 are public sector buildings; with 7 owners (5 in public sector); 10 are new development sites; and of the 28 connections, 16 are WBC owned buildings or sites (Appendix 1). The small number of key offtakers (7) 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. As presented at March 2021 JSC, the Outline Business Case (OBC, Appendix 1 of the [March 2021 JSC report](#)) notes that:

- a low carbon heat network taking heat from the public sewer via a centralised sewer source heat pump would offer value for money when compared to individual heat pump solutions; and that
- the proposed heat network offers a viable investment for a private sector implementation partner.

4.4. Significant stakeholder engagement has been carried out with offtakers and technical surveys have been conducted on all key buildings that are due to connect to the heat network.

4.5. Since March, the following steps have been taken:

- The analysis of the main sewer temperature, flow and depth has been completed. This study, conducted by consultants RECRIC ENERGY indicates that the assumed c.3MW of heat to be provided by the sewer source heat pump could be easily met, with additional heat (c.6MW in total) potentially being deliverable based on the variables monitored.

- A bid to HNIP was submitted and the council has received notification that an offer of funding has been made (Section 5).
- Letters of Intent have been received from key offtakers

4.6. As such, all three Gateways identified in the March 2021 JSC report have been met. Officers are now working through the legal requirements prior to accepting the HNIP funding in order to progress to the procurement phase.

5. HNIP Funding Offer

5.1. Management of the £320m HNIP grant programme is run by TriplePoint, on behalf of BEIS. This offers funding for:

- Heat Network Commercialisation
- Heat Network Construction

5.2. Both Commercialisation and Construction stage funding must be applied for simultaneously.

5.3. The council is in receipt of a funding offer from HNIP that consists of the following parts:

Amount	Type	Stage	Notes
£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 funding offer

5.4. The Commercialisation stage focuses on the final development of the heat network, in which the project sponsor contractually secures investment and future revenues, procures and appoints appropriate contractors, obtains relevant permits and permissions and makes any technical changes required to account for financial and contractual negotiations.

5.5. For the Worthing Heat Network, the council will appoint partners that will assist officers in developing a suite of procurement documents in order to procure a concessionaire partner to finance, design, build and operate the Worthing Heat Network. These partners will cover the following specialisms:

- Project Management
- Stakeholder Engagement
- Technical Assistance
- Commercialisation

- Legal & Procurement support

5.6. It is envisaged that the Commercialisation stage will be complete by the end of April 2022.

5.7. Where a project receives commercialisation funding but does not go on to reach financial close, recipients of the grant will not be required to repay any funding providing it can be shown that the failure to draw down construction funding was beyond the applicant's reasonable control.

5.8. The HNIP offer obliges the council to complete certain actions before either the Commercialisation or Construction funding are drawn down and/or spent. Attaching 'Conditions' to this type of funding is common and ensures that public funding is spent in accordance with the stated aims of the funding body (HNIP).

5.9. Conditions pertaining to Commercialisation have all been met by the council already and accordingly it is recommended that the council draws down the funds at the earliest available opportunity.

5.10. Construction funding must be drawn down by March 2021, however additional Conditions must be met prior to it being spent. These 'Utilisation Conditions' will form part of the focus of the Commercialisation stage, which will also see the launch of the procurement exercise to appoint the concessionaire partner that will finance, design, build and operate the heat network.

5.11. Once the procurement exercise has identified a preferred bidder, WBC will onward grant/loan the funds from HNIP to the concessionaire but in return set conditions for the concession including carbon standards, pricing protections and growth requirements. Further approval will be sought from JSC prior to the letting of this contract.

5.12. All Commercialisation Conditions have been reviewed by officers and supporting consultants and are recommended to be accepted. More information on the terms of the HNIP funding is presented in Appendix 2.

5.13. Should the council accept the HNIP funding offer, it is envisaged the following timescales will apply. Updates to JSC will be provided at each Gateway.

Step	Dates
Appoint supporting consultants and prepare tender documents	November 2021 - April 2022
GATEWAY: End of Commercialisation Review by HNIP associated with award of grant funding, and prior to final confirmation of Construction funding	
Tender period	May 2022 - January 2023

Bid evaluation and bidder selection	January 2023 - March 2023
Negotiation/approvals period	March 2023 - May 2023
Report to Joint Strategic Committee to approve: <ul style="list-style-type: none"> • Finalised Full Business Case • Allocation of finance for Connection Fee and Heat Tariff costs for council owned buildings • Award of contract to a private sector partner • Entering into a Connection and Heat Supply Agreement with the appointed contractor 	May 2023
GATEWAY: End of Procurement phase. Construction phase begins	
Contract Award	End May 2023
Mobilisation and Phase 1 Construction	Summer 2023 - Spring 2025
Phase 2 Construction	Throughout 2025

6. Issues for consideration

- 6.1. 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.
- 6.2. 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.
- 6.3. 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. It is therefore recommended to progress with the next steps for the heat network.

7. Engagement and Communication

- 7.1. 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. The Major Projects Team is closely integrated with the project.

- 7.2. The Worthing Planning team has been closely involved with the project. New policy has been developed 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.
- 7.3. Significant input from BEIS and HNDU has been received
- 7.4. Regular stakeholder updates continue to be held with offtakers: Worthing Theatres and Museums, Sussex Police, West Sussex County Council, the Ministry of Justice, Worthing Hospital (Western Sussex NHS Foundation Trust) and developers or their consultants for the sites at Worthing Gasworks, Union Place and the WICC.
- 7.5. The Chief Executive of Southern Water, who owns the sewer proposed as the primary heat supply point for the network, has assisted in the development of a Working Group between Southern Water and WBC. A draft Use of Sewer Agreement has been jointly developed, in preparation for the concessionaire partner to sign.
- 7.6. The County Highways Authority have been consulted on Highways consideration and there is no in principle objection to the heat network delivery.
- 7.7. Potential private sector partners have been engaged through two successful Investor Days. The most recent, in April, was attended by 69 personnel from potential bidders with at least six major organisations participating in follow-up discussions to discover more about the project and expressing an interest in the heat network. Officers continue to receive update requests periodically.

8. Financial Implications

- 8.1. The Council will receive overall funding of £5.383m of which £0.95m will relate to the commercialisation phase of the project.
- 8.2. As £4.433m of the funding will be utilised to support the construction of the heat network by a third party, the Council will need to amend the 2022/23 capital programme to meet the requirements of the legislative framework that the Councils operate under. Expenditure on grants and loans by the Council to support capital expenditure within the area should be treated as the capital expenditure of the Council as detailed within the Local Government Act 2003 and associated statutory instrument (The Local Authorities (Capital Finance and Accounting) (England) Regulations 2003),
- 8.3. 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.

- 8.4. 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 as a loan; 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 mirror the amount set aside to the amount repaid each year for loans given.
- 8.5. 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.
- 8.6. 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.
- 8.7. The loan can only be utilised to fund the construction of the heat network and not applied for any other purpose,
- 8.8. 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. Legal Implications

- 9.1 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.
- 9.2 When undertaking the Commercialisation Phase and developing the businesses case for delivery of the Heat Network, and the procurement process for the Service Provider (or Concessionaire) to deliver the Construction Phase, the Council must ensure:-
- The project is compliant with the Public Contract Regulations 2015 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.
- 9.3 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.
- 9.5 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.
- 9.6 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/2/3/2021 - Carbon Neutral 2030 - Worthing Heat Network](#)
- [Clean Growth Strategy](#)
- [Green Heat Networks Fund](#)

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.

APPENDIX ONE: Proposed Connections to the Worthing Heat Network

Owner	Owner
West Sussex Health & Social Care	WSCC?
Davison C of E Secondary School for Girls - WALLACE BUILDING	WSCC + Diocese
Davison C of E Secondary School for Girls - MAIN BUILDING	WSCC + Diocese
Worthing Library / Hub	WSCC
Lyndhurst Infant School, and Children & Family Centre	WSCC
Davison Leisure Centre	WSCC
Union Place - Hotel	WBC + LCR
Union Place - Phae 1 Comm	WBC + LCR
Union Place - Phase 1 Resi	WBC + LCR
Union Place - Phase 2 Resi	WBC + LCR
Union Place - Phae 2 Comm	WBC + LCR
Town Hall	WBC
Assembly Hall	WBC
Portland House	WBC
Museum & Art Gallery	WBC
Colonnade House	WBC
WICC	WBC
Pavilion Theatre	WBC
Connaught Theatre	WBC
Splashpoint Leisure Centre	WBC
Stagecoach	Private
BG Site: St William	Private
Grafton	Private
Teville Gate	Private
Sussex Police West Downs Division	Police
Worthing Hospital	NHS
Worthing Hospital - HOMEFIELD	NHS
Law Courts	MoJ

APPENDIX TWO: Key Terms of HNIP funding

WBC will draw down the commercialisation funding to allow the procurement and contracting process to proceed. This process is expected to take approximately 12 months (see timeline below).

The HNIP fund closes at the end of March 22 so WBC will also need to draw down the construction funds by this date. WBC will hold these funds until the procurement exercise is complete and 'conditions subsequent' of the HNIP contracts are met. Once these conditions are met WBC can release construction funding to the concessionaire.

The HNIP funding agreement consist of 2 contracts: The Grant Funding Agreement (GFA) and the Loan Funding Agreement (LFA).

Key terms:

GFA:

- This is a tripartite agreement between WBC, The Secretary of State for Business, Energy and Industrial Strategy as grant provider, Triple Point Investment Management LLP as agent
- WBC shall apply all amounts received under the Agreement towards the eligible costs only
- WBC will need to submit a request for drawdown of funds by 31st March 22 but cannot use the until conditions are met. For Commercialisation funds these conditions are expected to be met at time of signing contracts.
- To utilise the construction funds WBC / Concessionaire will need to submit a Construction Utilisation Request providing evidence of eligibility
- WBC/Concessionaire is required to provide an annual project budget to Triplepoint
- WBC/Concessionaire will be required to submit monthly or quarterly performance reports up to April 2033.
- WBC/Concessionaire shall maintain records of all expenditure incurred in relation to the project until the end of April 2033
- If, at any time following the contract date, the total costs of the project are less than the original projected costs, WBC/Concessionaire shall repay the Grant equal to the difference in the projected costs
- Where the grant relates to the commercialisation phase and the project does not progress to construction, WBC shall not be obliged to repay the Grant where it can reasonably demonstrate that the reasons for the Project stalling or terminating are outside its reasonable control.

LFA:

- This is a tripartite agreement as with the GFA
- Usage and reporting terms as with GFA
- Term of loan is 25 years from first repayment date
- Repayments due 6monthly in June and December.

- Interest rate 0.01%
- WBC/Concessionaire can repay loan early without penalty.

As part of the concession contract arrangements, WBC will ensure that all terms are backed off to the concessionaire and WBC indemnified by the concessionaire.