



ADUR & WORTHING  
COUNCILS

Executive Members for Regeneration  
19 March 2020

Decision to be taken on or after  
27 March 2020

Key Decision: No

Ward(s) Affected: All

## **Worthing Civic Quarter Heat Network Funding Approval**

### **Report by the Director for Digital & Resources**

#### **Executive Summary**

##### **1. Purpose**

- To update Members that Worthing Borough Council has been awarded £93,400 of government funding towards producing a *Heat Network Feasibility Study and Master Plan for the Worthing Civic Quarter site*. An opportunity for a heat network on this site was identified in the *Adur & Worthing Council Carbon Neutral Plan*. If found practical and viable a heat network could provide renewable heat to the public sector buildings on the site, delivering decarbonisation through reduced carbon emissions associated with heating. Adur & Worthing Councils committed to explore the feasibility of a heat network on the Worthing Civic Quarter site under *Platforms for Our Places 2020-2022* and *SustainableAW 2020-23*.
- To seek Executive Member approval to proceed to commission consultants to develop the heat network study.
- To seek Executive Member endorsement for the award of a contract to project manage consultants to produce the *Heat Network Feasibility Study and Master Plan*.
- A decision on this is sought urgently in order to align with plans for the Worthing Integrated Care Centre scheme.

## **2. Recommendations**

### 2.1 That Executive Members:

2.1.1 Note the award of £93,400 funding from the Government department of Business, Energy and Industrial Strategy (BEIS)'s Heat Network Development Unit to Worthing Borough Council.

2.1.2 Endorse the award of a contract to project manage the process of commissioning and contracting consultants to produce the *Heat Network Feasibility Study and Master Plan*.

2.1.3 Approve that officers work with the project manager to procure and commission consultants to develop the heat network study.

2.1.4 Approve a budget virement of £120,000 to fund the cost of the project the funding of which is detailed in section 7.1 of the report

2.1.5 To note that an update report will be presented once the feasibility study has concluded, subject to a viable and practical heat network opportunity being identified.

## **3. Context**

- 3.1. This report seeks a five day decision from Executive Members, in order to commission a *Heat Network Feasibility Study and Masterplan* for the Worthing Civic Quarter Site, within a timeframe that provides useful outputs to align with the project timetable for the Worthing Integrated Care Centre.
- 3.2. At the Joint Strategic Committee of July 9th 2019, Adur & Worthing Councils declared Climate Emergency. The Councils committed to:
- 3.2.1. work towards becoming carbon neutral by 2030;
  - 3.2.2. work with partners across the County and region to deliver this; and
  - 3.2.3. produce a strategy on how the Councils will work towards the carbon neutral target by January 2020.
- 3.3. At the Joint Strategic Committee of December 3rd 2019, members approved the adoption of the councils' Carbon Neutral Plan which identified interventions towards achieving the carbon neutral goal. It outlined a number of challenges to overcome. One of these was to decarbonise heating for council buildings, responsible for 42% of the councils' 3,000 tonne/year carbon

footprint. This could be achieved mainly through shifting from gas based systems to renewable heating systems such as heat pumps.

- 3.4. The Carbon Neutral Plan includes recommendations for specific buildings. It recommended that the existing, end of their life, gas boilers in Portland House and Worthing Town Hall, be replaced with renewable heating. Due to the high cost of individual air source heat pumps (ASHPs) for large buildings, the Plan recommended exploring the opportunity for a heat network for the whole Worthing Civic Site. (See paragraph 4.5 for a definition of a heat network).
- 3.5. The Plan recommends that by linking up all the buildings on the Worthing Civic Quarter Site (WCQ), greater efficiency and viability could be achieved, taking advantage of Government funding for viability assessments through the Heat Networks delivery Unit or HNDU; and funding for delivery through the Heat Network Implementation Programme or HNIP (see Section 4).
- 3.6. A heat network could potentially connect all buildings on the WCQ site, delivering efficiency and decarbonisation through development of an energy centre using heat pumps to supply heat to all the buildings on the WCQ site:

WCQ Building	Detail
Planned Worthing Integrated Care Centre (WICC)	New health development. Currently at RIBA Stage 3-4 (Spatial Coordination - Technical Design). Due to submit a Planning Application spring 2020 and commence build 2021-2 subject to approval.
Worthing Town Hall	Grade II Listed civic centre owned and occupied by WBC. Gas boilers which also supply the Assembly Hall, are at end of life.
Portland House	Civic office owned and occupied by WBC. Gas boilers are at end of life.
Assembly Hall	Grade II Listed venue owned by WBC, run by Worthing Theatre & Museums (WTM). (See para 6.4 for consultation undertaken).
Worthing Museum	Owned by WBC, run by WTM. Refurbishment is planned under the Let the Light In project, seeking Heritage Lottery funding.
Worthing Library	Owned by West Sussex County Council (WSCC). Undergoing refurbishment to create a Community Hub including changes to heating provision. WSCC have provided some match funding contribution towards this study. (See para 6.5 for consultation undertaken)
Worthing County Court	Owned by the Ministry of Justice. (See para 6.6).

- 3.7. Due to the advanced design stage of development of the WICC scheme, it is essential to progress with heat network investigations at speed to be able to

integrate with WICC plans and construction. This has resulted in this report seeking a decision from Executive Members in 5 days.

- 3.8. Under SustainableAW 2020-23 (Energy theme), the councils' committed to:
  - 3.8.1. *Explore a Heat Network for Worthing Civic Quarter: Seek Government funding, explore feasibility and begin implementation of a heat network if viable with BEIS and WSCC by Dec 2022.*
- 3.9. The potential for a heat network on the WCQ site is also recognised in the West Sussex County Council Energy Strategy and the Greater Brighton Energy Plan. The need to shift to clean heat is set out in the Government's Industrial Strategy and in the government funded regional South2East Local Energy Strategy (2018).

### **HNDU Funding for the Worthing Civic Quarter Site**

- 3.10. A funding bid to explore the heat network opportunity was submitted in October 2019 by Worthing Borough Council (WBC) to the Heat Network Delivery Unit (HNDU), part of the Government's Department of Business, Energy & Industrial Strategy. The bid sought match funding to undertake a techno-economic feasibility study to assess the viability of developing a heat network for WCQ site. The process of developing preparatory documents towards heat networks is closely defined by HNDU through guidance documents and expert support from the HNDU team.
- 3.11. In January 2020, HNDU announced the successful award of funding to WBC of £93,400 (see Section 7: Financial Considerations):
  - 3.11.1. £13,400 for the production of a Heat Map and Master Plan (67% funded)
  - 3.11.2. £40,000 for the production of a Feasibility Study (67% funded)
  - 3.11.3. £40,000 for Project Management (100% funded)
- 3.12. According to HNDU guidance, the Energy Mapping and Masterplanning stage covers activities in relation to the development of a strategic heat network masterplan. This will identify the extent of both short- and long-term potential heat network schemes through an area wide exploration, identification and prioritisation of heat network opportunities and how they might interrelate. It will also include a high level technical and economic assessment.
- 3.13. According to HNDU guidance, the Techno-economic Feasibility stage covers technical and economic activities in relation to:
  - 3.13.1. Heat demand; heat supply; heat and power distribution;

- 3.13.2. Cash flow modelling;
  - 3.13.3. Risk;
  - 3.13.4. Analysis of project economics with a strong focus on energy balance and cost economics (capex, fuel, and opex); and
  - 3.13.5. Assessment of the “do nothing” case and the carbon equivalent savings relative to that case of the options considered.
- 3.14. The funding for project management enabled WBC to quickly secure external capacity to manage the procurement, commissioning and development of the studies on behalf of WBC, and any associated stakeholder engagement with WSCC, the Ministry of Justice and WTM. This was essential to enable work to progress quickly in order to integrate potential plans with the WICC development, which is due to submit to the Planning Authority in April 2020.
- 3.15. It is intended that the Masterplan and Study will be developed at speed in order to capitalise on the opportunity to integrate plans with the WICC Development.

### **Progressing at Speed**

- 3.16. Using the £40,000 (100%) funding awarded by HNDU for project management, a contract was awarded to West Sussex Estates Partnership Ltd (WSEP). This award enables close collaboration with the WICC project, as WESP are also contracted to deliver project management support for the WICC scheme.
- 3.17. A procurement process is being conducted by WESP on behalf of WBC to secure consultants under contract (value £80,000) to produce the *Heat Network Feasibility Study and Master Plan*.
- 3.18. The procurement process is scheduled to conclude in late March. Subject to member approval, the contract is scheduled to be awarded on March 31st 2020, and consultants will commence work in April, concluding with a final *Heat Network Feasibility Study and Master Plan* in July.
- 3.19. In order to ensure the WICC energy centre design has spatial capacity for plant to supply a WCQ Heat Network, the successful consultants will be tasked with providing early input to the WICC Mechanical and Engineering Strategy, and make recommendations for any necessary amendments.

#### **4. Government Support for Heat Networks**

- 4.1. The government's Industrial Strategy recognises that in order to reduce carbon emissions across the economy, carbon reduction must be achieved in the heating sector. Following common practice in Europe, the Government aims to incentivise the delivery of heat networks as a way of switching to renewable heating and delivering greater efficiencies across all building types.
- 4.2. To assist in the local delivery of heat networks, the government has set up the Heat Network Delivery Unit (HNDU) and the Heat Network Investment Project (HNIP).
- 4.3. HNDU provides grant funding for heat network masterplans and feasibility studies, and has been operating since 2015. Since its inception, HNDU has run 9 funding rounds – awarding in excess of £19 million in total. Over 200 unique projects have so far been supported across 140 local authorities.
- 4.4. The HNIP offers finance to support the delivery of heat network infrastructure, providing finance where there are viability barriers that prevent delivery, and where heat networks have potential for expansion. It aims to: increase the number of heat networks being built, deliver carbon savings, and help create the conditions necessary for a sustainable heat network market to develop. Government has allocated £320 million investment to provide scale to the heat network market by supporting individual projects across England and Wales through HNIP.
- 4.5. A heat network is defined as a system for distributing heat generated in a centralised location, via a network of underground pipes. Heat networks form an important part of the government's plan to reduce carbon and cut heating bills for customers (domestic and commercial). They are one of the most cost-effective ways of reducing carbon emissions from heating, and their efficiency and carbon-saving potential increases as they grow and connect to each other. They provide a unique opportunity to exploit larger scale – and often lower cost – renewable and recovered heat sources that otherwise cannot be used. It is estimated by the Committee on Climate Change that around 18% of UK heat will need to come from heat networks by 2050 if the UK is to meet its carbon targets cost effectively.

## **5. Issues for consideration**

- 5.1. The gas boilers at Portland House and Worthing Town Hall are at the end of their life and are due for replacement. Finance is allocated in the councils' Investment Strategy for their replacement (see Finance Para 7).
- 5.2. Replacing these boilers with 'like for like' gas boilers could deliver some efficiency improvements but would not deliver the scale of carbon reduction sought by councils' carbon neutral commitment. Replacement gas boilers would need replacement again within 8-10 years with renewable plant. Greater value for money would be achieved by replacement with a renewable system now.

## **6. Engagement and Communication**

- 6.1. Cllr Kevin Jenkins was informed of the funding application to HNDU in October 2019, and supported it's development and plans to align with the WICC development, provided it did not delay delivery of the WICC scheme.
- 6.2. Finance, Legal and Democratic Services and Procurement Teams have provided guidance to the project.
- 6.3. Updates on the project are reported to the councils' internal Carbon Reduction Delivery Group, chaired by Director of Digital & Resources, and including officers from Estates, Facilities & Technical Services, Major Projects and other teams. The Major Projects Team are especially closely integrated with the project including the WICC Project Manager and Design Team.
- 6.4. Worthing Theatres & Museums have been consulted and will be involved in the projects as it progresses in relation to both the Assembly Hall and Worthing Museum.
- 6.5. West Sussex County Council's Business & Energy Manager and Assistant Director of Environment were consulted early in relation to the integration of the Worthing Library into the project which they strongly support. The County Council has provided some match funding to the project and will be involved in the projects as it progresses
- 6.6. The Ministry of Justice, national Energy Manager has been consulted in relation to the integration of the Court building into the potential project. The MoJ are very supportive and will be involved in the projects as it progresses.

- 6.7. The government has assigned an officer to oversee the project from BEIS who will provide oversight and guidance throughout the project.
- 6.8. Under the Heatmap & Masterplan strand of work, consultants will be exploring opportunities to expand a heat network anchored at the Worthing Civic Quarter out into the surrounding area. Consultation with relevant stakeholders will be undertaken as part of this.
- 6.9. The Heat Map will provide a helpful background document to the emerging Worthing Local Plan, identifying where heat networks are viable and practicable for allocated development sites and existing development.
- 6.10. It is proposed the *Worthing Civic Quarter Feasibility, Heatmap and Masterplan Study* will be brought to the Joint Strategic Committee after it has been finalised in July 2020.

## 7. Financial Implications

- 7.1. Overall the project is expected to cost £120,000 which is funded as follows:
- BEIS £93,400
  - West Sussex County Council £10,000
  - Worthing Borough Council £16,600 which is funded from within existing budgets.
- 7.2. The grant funding received from the HNDU of BEIS can be broken down as follows:

Item	Total Cost of item	HNDU Funding Award (%)	HNDU Funding Award (£)	Local Authority Match funding Required: 33%
Heat Map and Master Plan	£20,000	67%	£13,400	£6,600
Feasibility Study	£60,000	67%	£40,000	£20,000
Project Management	£40,000	100%	£40,000	£0
<b>Total</b>	<b>£120,000</b>		<b>£93,400</b>	<b>£26,600</b>



7.3. The requirement for 33% match funding of £26,600 is funded as follows:

Source	Amount
Contribution from West Sussex County Council	£10,000
Contribution from WBC ( £13,000 virement from major projects Budget and £3,600 from Sustainability Budget)	£16,600
<b>Total</b>	<b>£26,000</b>

7.4. The current capital Programme contains provision for replacement heating systems as follows:

Project	2020/21 £	2021/22 £	Total £
Portland House - Replacement Boilers and Heating upgrade	148,000		148,000
Town Hall and Assembly Hall - Preparatory works for the replacement of the boilers and air conditioning.		100,000	100,000
Total approved budget	148,000	100,000	248,000

7.5. In addition, budget provision has been made for Carbon Reduction Schemes which generate a revenue savings which is to be released on an invest-to-save business case basis:

	2020/21* £	2021/22 £	Total £
Adur District Council	317,210	325,000	642,210
Worthing Borough Council	399,020	400,000	799,020
	716,230	725,000	1,441,230

\* To be carried forward from 2019/20.

7.6. At this stage the cost and any potential grant funding for the heat network is unknown, consequently an update report will be presented once the feasibility work is completed.

## 8. Legal Implications

- 8.1. Under Section 111 of the Local Government Act 1972, the Council has the power to do anything that is calculated to facilitate, or which is conducive or incidental to, the discharge of any of their functions.
- 8.2. Section 3(1) of the Local Government Act 1999 (LGA 1999) contains a general duty on a best value authority to make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness.
- 8.3. s1 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.
- 8.4. 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.
- 8.4. In spending the grant funding awarded by the Government department of Business, Energy and Industrial Strategy (BEIS), the Council must ensure that it complies with any grant funding terms and conditions attached to it, and ensure that its procured the works and services to be obtained in accordance with the Public Contract Regulations 2015 and the Council's Contract Standing Orders found at Part 4 of the Council's constitution on the Council's website.

### Background Papers

- Report to [JSC 09.07.2019: Climate Emergency Becoming Carbon Neutral by 2030.](#)
- Report to [JSC 03.12.2019: Working towards the 2030 target - Adur & Worthing Councils' Carbon Neutral Plan](#)
- Report to JSC, December 2019: [Investing for the future: Capital Programme 2020/21 to 2022/23](#) (Corporate Investment Strategy 2020-2023)
- [Adur & Worthing Councils Carbon Neutral Plan, December 2019 \(AECOM\)](#)
- [SustainableAW 2020-23](#)

- [West Sussex County Council Energy Strategy and Action Plan \(2016\)](#)
- [South2East Local Energy Strategy \(2018\)](#)
- [Heat Networks Delivery Unit Round 9 Guidance](#)

**Officer Contact Details:-**

Francesca Iliffe

Sustainability Manager

07771 381 385

[francesca.iliffe@adur-worthing.gov.uk](mailto:francesca.iliffe@adur-worthing.gov.uk)

## **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.

#### **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 avert the predicted catastrophic impacts of climate change on the environment, economy and communities.

### **4. Governance**

- The adoption of a Carbon Neutral Plan is intended to show leadership and put the councils own house in order in response to the climate emergency. This aligns with national legislation (the Climate Change Act 2008); national and regional policy, and the councils own policy under Platforms for Our Places and Sustainable AW.