

Decision Pathway – Report



PURPOSE: Key decision

MEETING: Cabinet

DATE: 05 October 2021

TITLE	Heat Network Expansion – Bedminster and Temple - UPDATE	
Ward(s)	Southville, Bedminster, Lawrence Hill	
Author: Paul Barker	Job title: Energy Infrastructure Manager	
Cabinet lead: Cllr Nicola Beech, Cabinet Member for Climate, Ecology, Waste and Energy	Executive Director lead: Stephen Peacock, Executive Director Growth and Regeneration	
Proposal origin: BCC Staff		
Decision maker: Cabinet Member		
Decision forum: Cabinet		
<p>Purpose of report:</p> <ol style="list-style-type: none"> 1) To update Cabinet on progress made on the Bedminster and Temple heat networks 2) To seek Cabinet approval to further develop and expand the heat networks through progression of the Bedminster and Temple schemes 3) To note a £1.8m government [HNIP] grant award to develop a “shovel-ready” project for Temple Heat Network delivery by the City Leap joint venture from 2022 onwards 4) To accept and spend a £1.35m government [HNIP] grant award, to develop a “shovel-ready” project for Bedminster for delivery initially by BCC. 5) In respect of Bedminster to authorise £0.76m borrowing (in addition to £4.9m provisionally allocated by Cabinet in March 2020) to meet the terms of the UK government grant offer but retain the option for BCC to accept £3.27m of HNIP loan funds replacing PWLB borrowing if it is in the interests of BCC 6) Authority to apply for any additional grant funding that could become available at short notice, that would further enhance the commercial viability of the schemes 		
<p>Evidence Base:</p> <p>The Council has invested over £15m in its heat networks to date and supplies over 1,000 properties with low carbon heat. A comprehensive city-wide heat network will be a crucial aspect of the action required if Bristol is to achieve its carbon neutral ambitions and represents a significant investment opportunity as part of the City Leap programme. Prior to the City Leap Energy Partnership being in place, it is critically important that the council continues to support the development of the heat network to meet the connection timeframes of new developments, ensure long term financial viability of the network, and progress along the zero-carbon pathway.</p> <p>In March 2020 Cabinet approved the submission of an HNIP grant bid to support the development of the next phase of the network, namely Bedminster and Temple district heating networks, and agreed to support this through borrowing of £4.9m conditional on the HNIP bid being successful. HNIP has made an offer for which approval is now sought.</p> <p>Temple heat network: This network will supply low carbon heat to new developments being built in the Temple and St Philips areas of the city, making use of a combination of aquifer and floating harbour zero carbon heat sources, including the developments on Temple Island.</p> <p>Bedminster heat network: This network will initially supply low carbon heat to new developments being built in this area of the city as well as some existing buildings including Bristol South Pool. An energy centre is being proposed either utilising heat from Bristol’s sewers or from a large air/ground source heat pump that is being investigated as part of Bedminster Phase 2. The council is currently in negotiations with Wessex Water to access the sewer heat.</p>		

Following March 2020 Cabinet approval:

- BCC Energy Service has undertaken detailed development work and identified a significant increase in the number of buildings connecting to both heat networks, increasing the size of the capital projects and the opportunity to decarbonize heat.
- BCC Energy Service successfully applied for the HNIP (Heat Network Investment Project) government grant
- BCC set up a Special Purpose Vehicle (Bristol Heat Networks Ltd) as a condition of the grant funding

Bedminster and Temple Heat Network Summary and Proposal

Temple Heat Network: a £1.8m commercialisation grant has been offered and will be drawn down to progress detailed design of this network with no additional funding required by BCC.

Construction of the network (estimated at £20.6m) is subject to demonstration of commercial viability and is planned to be delivered by the City Leap JV which would meet the capital cost in full.

Bedminster Heat Network: a £1.35m commercialisation grant has been offered and will be drawn down to progress the detailed design of this network. Construction of the network (estimated at £11.64m) is subject to commercial viability and would be delivered in two stages:

1) The first stage of this heat network is required to be co-ordinated with Highway works being carried out in early 2022 to minimise disruption to residents and meet timelines for new developments heat-on requirements. It is critical that these works take place to support the Bedminster Green scheme.

2) The second stage is planned to be delivered by the City Leap JV

3) To meet the grant terms and conditions, the Council must agree to underwrite the full borrowing requirement for the Bedminster scheme, which is £5.66m, of which £4.9m is already allocated. This would require an additional £0.76m of borrowing:

The funding changes are shown in the table below:

Projects	Original request in March '20			Oct '21 update	
	Temple	Bedminster	Total	Bedminster	Incremental
	£'m	£'m	£'m	£'m	£'m
Total CAPEX	£5.40	£6.20	£11.60	£11.64	£5.44
Funded By:					
Grant funding - HNIP	£2.40	£2.90	£5.30	£1.35	-\$1.05
Loan Funding - HNIP					£0
Connection charges	£1.20	£0.50	£1.70	£4.63	£4.13
Addition net Borrowing (PL19)	£1.30	£3.30	£4.60	£5.66	£2.36
	£5.40	£6.20	£11.60	£11.64	£5.44
Peak Cash funding requirement				£1.16	

	Temple		Bedminster	
	Previous	Now	Previous	Now
Total annual heat demand, MWh	9,598	26,547	9,418	11,334
Network length, m	542	1,980	1,801	1,541
Renewable heat generation capacity, MW	1.5	3.1	1.5	1.5
Total heat generation capacity, MW	4.5	13.5	2.2	3.3
Number of energy centres	1	2	1	1

HNIP and City Leap - Notes/key points

- HNIP commercialisation grants have been offered on the basis they provide funding for the cost of commercialisation for the projects. Commercialisation grant covers network design, procurement, planning, contract negotiations, and

legal costs, with these costs predominantly being incurred during the 2021/22 year.

- The HNIP funding offer must be accepted or declined by the end of October 2021
- The Bedminster heat network is part of the Bedminster Green regeneration scheme and associated co-ordination of related BCC works (Highways, river restoration and public realm). The regeneration of Bedminster Green will deliver more than 2,000 new homes, including affordable homes and student accommodation, new commercial space, and a new multi-story car park. Three of the plots are estimated to start on site by Q1 2022/23 all of which require connection to the heat network to meet planning requirements, and enable the major transport works to follow in July 2022.
- City Leap bidders have been informed of the HNIP funding offers and are supportive of the Bedminster and Temple network proposals.
- Bristol Heat Networks Ltd (BHN) currently holds the HNIP-funded assets for the Redcliffe and Old Market heat networks: Bedminster assets would similarly be transferred once constructed, along with all customer agreements. This will require BCC and BHN to enter onward grant and loan arrangements to allow BHN to fund the assets. Furthermore, BCC will onward loan any borrowing.

Cabinet Member / Officer Recommendations: -

1. Note the HNIP offer of £1.8m for the Temple scheme
2. Authorise the Executive Director for Growth and Regeneration, in consultation with the Cabinet Member for Climate, Ecology, Energy and Waste, the Cabinet Member for Finance, Governance and Performance and the s151 Officer, to accept and spend the HNIP grant of £1.35m in respect of the Bedminster scheme (including approval of grant conditions).
3. Approve the allocation of a further £0.76m borrowing (to add to the £4.9m approved in March 2020) for the next phases of the Bristol heat networks (namely Bedminster).
4. Authorise the Executive Director for Growth and Regeneration, in consultation with the Cabinet Member for Climate, Ecology, Energy and Waste, the Cabinet Member for Finance, Governance and Performance and the s151 Officer, to accept and spend the HNIP loan of £3.27m as a replacement for allocated Public Works Loan Board (PWLB) funding as an alternative funding mechanism only if this provided more beneficial terms than using PWLB.
5. As outlined in the report, authorise the Executive Director for Growth and Regeneration to:
 - a. Enter contractual arrangements with Wessex Water (Bedminster network) and subject to these, progress the sewer heat or alternative air or ground source heat pump energy centre solution
 - b. Enter into connection agreements and supply agreements, if required, prior to transfer of the network to Bristol Heat Networks Ltd or City Leap
 - c. Apply for the appropriate permissions and licences as required to progress the next phase of the heat networks (including Energy Centre planning permissions)
6. Authorise the Executive Director for Growth and Regeneration, in consultation with the Cabinet Member for Climate, Ecology, Energy and Waste, to procure and enter contracts for delivery of all goods, works and services (including associated operation and maintenance contracts) as required to deliver the work to the value of £11.64m as outlined in the report.
7. Authorise the Executive Director for Growth and Regeneration, in consultation with the Cabinet Member for Climate, Ecology, Energy and Waste, the Cabinet Member for Finance, Governance and Performance and the s151 Officer, to apply for any further related funding that maybe above the key decision threshold but is in line with the development of these networks, for example the Public Sector Decarbonisation Scheme and the Green Heat Networks Fund.

Corporate Strategy alignment:

1. This report supports the Key Commitment to 'Keep Bristol on course to be run entirely on clean energy whilst improving our environment to ensure people enjoy cleaner air, cleaner streets and access to parks and green spaces.'

City Benefits:

1. Keep Bristol on course to be run entirely on clean energy by supporting the build out of low carbon heat networks
2. Improve our environment to ensure people enjoy cleaner air through supporting the further deployment of renewable heat generation.
3. Improve physical and mental health and wellbeing by making residents' homes warmer and cheaper to heat, reducing inequalities and the demand for acute services.
4. Tackle food and fuel poverty by reducing energy bills.
5. Create jobs, contributing to a diverse economy that offers opportunity to all and makes quality work experience and apprenticeships available to every young person
6. Achieve the above benefits in addition to enabling the site to come forward for further development

Consultation Details:

1. Discussions are ongoing with Wessex Water

Background Documents: Cabinet report - Heat Network Expansion final March 2020

Revenue Cost	£Nil	Source of Revenue Funding	N/a
Capital Cost	£11.64m	Source of Capital Funding	Borrowing: £5.66m, HNIP grant (Bedminster only): £1.35m, Connection charges: £4.63m
One off cost <input type="checkbox"/>	Ongoing cost <input type="checkbox"/>	Saving Proposal <input type="checkbox"/>	Income generation proposal <input checked="" type="checkbox"/>

Required information to be completed by Financial/Legal/ICT/ HR partners:

1. Finance Advice: The Financial elements of the updated Heat Network Business Plan (Model version 3.5) for Bedminster has been reviewed, and no significant items have been noted, other than the regular monitoring and control of the Capital Investment Program in line with the Authority's code of practice and financial governance arrangement.

The Commercial risk primarily centres on Connection Fee Income, and this needs to be continually assessed with appropriate actions to mitigate the impact of not achieving the required level of connection fee and income generation to maintain the borrowing requirement within the requested envelope of £5.66m

The ability to onward lend to a City Leap Partner needs to be ratified, as is clarity as to whether the Loan is underwritten by BCC in the event the Loan is made to BHN Limited.

In assessing the revised Business Plan (Model v 3.5), an initial period of 5 years to FY 23-24 has been taken, consistent with the capital rollout program. The table below summarises the position, and the level of BCC funding required to maintain a cash neutral position.

Bedminster (Model v 2.6.1)	2021/22 £'m	2022/23 £'m	2023/24 £'m	2024/25 £'m	2025/26 £'m	5 Yr Total £'m
Capex	(2.99)	(2.59)	(0.19)	(2.76)	(3.10)	(11.64)
Repex	-	-	-	-	-	-
Grant Income	1.35	-	-	-	-	1.35
Connection Fees	-	0.78	-	3.79	0.06	4.63
Net Outlay	(1.65)	(1.81)	(0.19)	1.03	(3.04)	(5.66)
EBITDA	-	(0.19)	(0.16)	(0.04)	0.28	(0.10)
Operating Cash Flow (Pre Finance)	(1.65)	(2.00)	(0.35)	0.99	(2.76)	(5.76)
Cum	(1.65)	(3.64)	(3.99)	(3.00)	(5.76)	

Finance Business Partner: Paul Keegan, Interim Finance Business Partner, 28th June 2021

2. Legal Advice:

When procuring goods, works and services pursuant to this report, officers must ensure that all applicable procurement regulations (including utilities regulations if these apply), and all energy-sector regulations are complied with, together with the Councils own procurement rules. Client officers will need to seek legal advice throughout the process of implementation. Officers will also need to be conscious of any potential public subsidy risk involved in the proposed arrangements and seek legal advice to ensure the relevant rules are not engaged and/or exemptions are available.

If any prudential borrowing is to be transferred to any third party (including BHNL) legal advice must be sought to ensure such entities are bodies governed by public law (ie the only bodies that can receive prudential borrowing).

Legal Team Leader: Eric Andrews, Legal Services, 26/8/21

3. Implications on IT: No anticipated impact on IT Services

IT Team Leader: Simon Oliver, Digital Transformation Director 13 th July 2021		
4. HR Advice: Staffing resource is required for the construction of the new energy centre, namely a Construction Manager and a project manager. There are no other HR implications evident at this stage but the position should be reviewed through the course of the project.		
HR Partner: HR Partner: Celia Williams, HR Business Partner, Growth & Regeneration 13 th July 2021		
EDM Sign-off	Stephen Peacock	27/08/2021
Cabinet Member sign-off	Cllr Beach	27/08/2021
For Key Decisions - Mayor's Office sign-off	Mayor's Office	06/09/2021

Appendix A – Further essential background / detail on the proposal	YES
Appendix B – Details of consultation carried out - internal and external	NO
Appendix C – Summary of any engagement with scrutiny	NO
Appendix D – Risk assessment	YES
Appendix E – Equalities screening / impact assessment of proposal	YES
Appendix F – Eco-impact screening/ impact assessment of proposal	YES
Appendix G – Financial Advice	NO
Appendix H – Legal Advice	NO
Appendix I – Exempt Information	No
Appendix J – HR advice	NO
Appendix K – ICT	NO
Appendix L – Procurement	NO