Heat Networks Policy Overview – Opportunities and Challenges

Introduction

Vattenfall is one of Europe's largest energy companies and has been one of the most significant developers and investors in this sector for decades. Since setting up our UK heat business in 2018, our ambition has been to develop and directly invest up to £1bn in the sector across UK cities by 2030. This will support a transition to net zero while reducing customer bills, delivering local economic growth and providing benefits to the communities we work in.

In Bristol, as part of the Bristol City Leap partnership, we are working closely with the City Council and Ameresco, to invest and expand the heat network, which already serves over 11,500 customers Over 20 years, Bristol City Leap is seeking to invest up to £1bn to roll out local infrastructure to support the city's clean energy transition.

In Scotland, our 50/50 joint venture with Midlothian Council is utilising waste heat to deliver reliable, low-cost heat to communities south of Edinburgh. The Shawfair scheme is an example of a successful public and private collaboration where £7m of public finance will enable £40m plus of private capital to come forward to deliver infrastructure that significantly eliminates carbon emissions and reduces costs to customers.

In North London we are building one of the city's largest heat and cooling networks in Brent Cross Town, to include the largest all electric air source heat pump solution in the UK, that will serve over 6,700 customers and over 3 million square feet of commercial space.

We welcome the direction of travel in Scotland on policy as it relates to heat networks investment and the commitments of the Scottish Government. Scotland cannot meet its climate change obligations without heat network development at pace and scale. However, we urge more urgency in the implementation of these policies, including the provisions of the Heat Networks (Scotland) Act 2021 and the introduction of the Heat in Buildings Bill. And there remain some specific issues that are set out below and which are currently eroding investor confidence in the sector.

Key Issues

Statutory undertaker rights: Heat networks do not have the same automatic rights that are shared by other parts of the energy sector and other utilities. These include permitted development rights, compulsory powers to access land for the purposes of running, operating and maintaining the network as well as compulsory acquisition powers: and undertaker rights with respect to placing apparatus in a public highway (all of the above currently need to be a matter of private negotiation and establishment), The lack of these SURs is creating detriment to heat network developers. Statutory undertaker rights were included in the Heat Networks (Scotland) Act 2021 but are yet to be implemented via statutory instrument. We recognise that the Scottish Government is due to address this but there has been significant delay and meantime the negative effects continue to be felt. This directly impacts Scottish Government's ability to achieve its goals in respect of Net Zero.

Building standards:. Heat networks are treated differently to other low carbon heat solutions in the way they interact with current guidance on building standards. This is causing significant detriment, driving away potential connections and undermining investor confidence. In essence new dwellings connecting to a network would be required to install additional measures, such as solar panels, over and above an identical building with a single ASHP heat solution (this is the case regardless of the energy efficiency of the network). Whilst we've been proactively developing alternative approaches to building standards at a local authority level, we believe this issue needs to be addressed systemically. Attached separately is an explainer of the issue. We are keen to work with government in all departments on designing a solution which works for housing developers and the heat network sector. The failure to resolve is because the issue falls between two government departments – energy and housing. We need them to join up their thinking to reach a resolution.

Exclusive concessions and incentivising connections: As part of its new regulatory framework for heat networks the Scottish Government is due to develop and introduce a new permitting scheme.The aim as we understand it is to introduce an element of competition where prospective developers bid to hold a zone permit which then gives them the authorisation to build networks within a zone. The area covered by the permit will depend on the size of the heat network zone – some larger zones in the bigger cities will be split into separate permitting areas.

As originally conceived under the Heat Networks (Scotland) Act 2021 the permitting system would automatically confer exclusive development rights to that zone or part of zone (exclusive concessions). Permitting is an additional layer of bureaucracy. We believe that this additional bureaucracy is acceptable but only if accompanied by exclusive concessions. Exclusive concessions will allow us to plan and deliver networks strategically on a large scale. This in turn will increase demand assurance and increase investor confidence. It will also have the added benefit of

allowing us to look at connecting hard to treat existing buildings to meet the retrofit challenge.

There is a suggestion, however, that the Scottish Government is rowing back on the previous commitment that a holding a zone permit will come with exclusive development rights. We understand the concern that exclusivity lays the system open to challenge on a consumer protection basis by creating a monopolistic position for the winning permit holder despite the Government and CMAs' findings in 2018 that choice of delivery model and adequate consumer protection schemes mitigate potential abuse of these natural monopolies and that that is preferable to having multiple installation of entities infrastructure in single areas.

Demand assurance and the Heat in Buildings Bill: Along with exclusive concession we also need government to take steps to encourage or incentivise connections to heat networks. The Scottish government announced in April 2025 that it would require public buildings to connect to heat networks by through a series of phased targets, which will be consulted on.

Key requirements for public buildings

- **Assessment:** All public sector building owners must assess their buildings for suitability to connect to a heat network.
- **Connection timeline:** Publicly owned buildings must meet zero-emission heating requirements by 2038, with specific, phased targets to be consulted on.
- **Mandatory connection:** Subject to devolved competence, the government will bring forward regulatory proposals to mandate the installation of zero or very near zero emissions heating systems in existing buildings, including a requirement to connect to heat networks where feasible

We welcome this proposal. Public buildings being required to connect will begin to provide the demand assurance that will provide investor confidence in the heat networks sector. But more, through providing assured loads on the heat network, we can begin to look at how best to address the issue of retrofit and connections to existing buildings.

We expected the Heat in Buildings Bill to be introduced in Q3 of 2025, to complete its parliamentary passage before the end of the current parliament and are concerned that this seems to have been delayed.

Along with a requirement to connect, the Heat in Buildings Bill can support heat networks by looking again at what measures or roles can be put in place and local authority level to better drive heat network delivery through the LHEES process.

Joining up agencies and stakeholders – need for better cross organisational working and a shared vision for decarbonisation: Across the heat networks

sector, w are experiencing issues around working with other agencies and organisations locally, including public bodies such as Scottish Water and the NHS. While we appreciate that the core purpose of such organisation is not to contribute to net zero targets, they should and do have this as part of their mission statement. We would like to play a role in helping them discharge this responsibility but there is a lack of joined up thinking or sense of shared mission – and no specific mechanism for overcoming obstacles and barriers that this creates. We would like the Scottish Government to consider how it might play a central role in providing a framework for agencies working together at local level on net zero and considering the role of low carbon solutions provided by sectors such as heat networks (something that would apply across sectors akin to the Wellbeing of Future Generations Act in Wales, but for low carbon infrastructure). If it is not possible to legislate for a positive obligation on statutory agencies to generally cooperate in achieving net zero – then we would advocate for publication of a strong ministerial statement across multiple departments to that effect. We believe that this form of soft persuasion would be beneficial to unlocking stalled conversations with statutory bodies where we are trying to install infrastructure that could potentially affect their undertaking and where, as a result, the default position of these third parties is to be obstructive not co-operative.

Funding for heat networks: Scotland provides heat network funding through the Scotland's Heat Network Fund (SHNF), a capital grant program for public and private organizations to develop new, expand existing, or decarbonize existing heat networks. Additionally, the Heat Network Support Unit (HNSU) offers pre-capital grant funding for feasibility studies and business cases. We believe that whilst the market is in its early stages and in the absence of demand assurance this public funding will continue to be needed beyond the life cycle of the current funding pot. Vattenfall are investing in establishing the emerging seeds of expansive networks. That initial seed investment covers the additional capacity for future growth that enables organic expansion of networks.

In general, we need government to consider how funding can support projects of this type to allow for longer draw down of funds. City scale low carbon projects take a minimum of two years to procure and develop/design and then up to 15 years to deliver. Any funding that the Scottish Government is able to provide against such low carbon projects should align with the practical reality of capital expenditure over time as part of delivery otherwise the funding mechanism will not work.