

Chapter 1: Introduction

- 1. In your opinion, could any of the proposals set out in this plan unfairly discriminate against any person in Scotland due to a protected characteristic? (Protected characteristics are age, disability, sex, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief.)**

No

- 2. In your opinion could any of the proposals set out in this plan have an adverse impact on children's rights and wellbeing?**

No

Chapter 2: Ambition & targets

- 3. In your view, what should be considered in setting the 2035 heat network supply target?**

We are of the opinion that it is too early to be considering setting a new 2035 heat network supply target. There is much work to be done to build the infrastructure to enable the meeting of the 2027 and 2030 targets. It is our view that a later target could be consulted on closer to the 2027 target, when more heat networks will be coming onstream and we will be much more aware of what barriers still need to be overcome.

We are unsure that the sector will have progressed significantly in 18 months, to accurately forecast what will be needed to achieve a 2035 target. When setting an additional target, considerations should be taken of the state of the heat network supply chain, overall heat demand and waste heat access.

Another area of concern are the different targets set out in the Heat in Buildings Strategy, of a million homes and 50,000 non-domestic properties to be on zero or close to zero emissions heating systems by 2030 and the heat network supply targets of 2.6 TWh by 2027 and 6TWh by 2030. Both these sets of targets need to be aligned with each other.

4. Are there particular approaches or measures that could be taken through our proposals in this plan to reduce the depth and rate of fuel poverty? This could for example consider the approach of the heat network licensing authority or measures through our funding programmes?

Fuel poverty is a complex and multifaceted issue and the relationship between the heating system used and the ability of a household to adequately heat their home is not a direct one. Other factors such as building infrastructure in relation to insulation and energy efficiency plus other pressures on household income also play a significant role.

Due to this complexity, we believe it will be difficult to reduce the depth and rate of fuel poverty through the Heat Networks Delivery Plan alone. Other measures such as funding programmes subsidising the bills of the fuel poor would also be needed.

As we have argued before in our submission to the draft Heat in Buildings Strategy consultation, heat decarbonisation and fuel poverty should not be intrinsically linked. A systemic approach is needed, and low-carbon heat alone is not the main solution to alleviate fuel poverty.

As we seek to grow the heat network market and drive down costs in the long-term, we think that putting the onus onto heat network operators to reduce fuel poverty in the short term is not an effective approach. This also runs the risk of disincentivising operators of connecting heat networks in areas of high deprivation, for example.

However, an action for developers, which would help to reduce fuel poverty, would be to drive up energy efficiency before subsidising heat network operation. This is a Scottish Government ambition: to remove poor energy efficiency as a driver for fuel poverty. Part of the problem is that obligations for heat networks and energy efficiency are held by different organisations so this issue cannot be dealt with holistically at present.

The challenge is providing decarbonised heat at an affordable cost; however, waste heat reduces cost considerably and the societal cost from inaction is likely to be greater. This is an issue that is a focus of the City Decarbonisation Delivery Plans (CDDP) that are being piloted in some English cities.

We are aware that the Home Energy Scotland loans scheme can be used to fund heat network connections, but this message needs to be amplified so that more are aware of it and its conditions, for example, that the heat network needs to be connected to a renewable source.

Chapter 3: Regulatory regime: Heat Networks (Scotland) Act 2021

5. Do you agree or disagree with the order of the three stages identified above for setting up the regulatory regime? Please explain.

We agree with the order of the stages as set out, in that building assessment reports and zoning are critical to the success of the Act and therefore, should be prioritised first. However, there is an unaddressed gap between the first and second priorities, in that there is no clarity on transition processes. When zoning and building assessment reports begin, this will stimulate the market to build heat networks. This creates a question of what will happen (the consent and permitting process specifically) to existing networks and how these will be applied retrospectively.

6. In your view, what are the key challenges faced when decarbonising existing heat networks (please tackle both improving the efficiency and switching to low and zero emission heat sources)? Please state if your answer relates specifically to one or more heat networks in Scotland.

Our answer relates more generally to multiple heat networks in Scotland. One of the key challenges is cost. There are many existing networks powered by gas Combined Heat and Power (CHP) systems, which means they have an electricity income as well as heat. If those heat networks decarbonise then the impact potentially to the heat customers is that the bills are no longer subsidised by the electricity revenue. This is an important issue as currently, there are many gas CHP networks feeding areas of deprivation, for example, tower blocks across Scotland.

There is an important link with buildings design and buildings refurbishment. Not only are the fabric improvements important to bring heat loads down, but improving efficiency is also related to getting the heating systems ready for lower temperature heat networks. For instance, getting building services designers to actually install building heating systems which work at 60 degrees as opposed to 80 degrees.

The link to building regulations to support the move to a different kind of supply arrangement cannot be overstated. However, building regulations are mainly concerned with building level solutions, and currently address the requirement for lower temperature heat supply and how the heat is delivered. This situation is not ideal for heat network developers.

A concern of our members is whether heat network zoning will take account of existing networks; we sincerely hope that it will.

7. What support is required to help existing networks improve their efficiency and switch to low or zero emission heat generation?

Support for doing feasibility studies about alternative heat sources for existing heat networks would be useful to feed into decarbonisation plans collectively.

Other support required is to increase the amount of resource in local authorities. We see mention of the Local Authority Cost Strategy and highlight here that 2024 is much too late for this to be produced. Work needs to be undertaken now with local authorities and COSLA to ensure that no local authority is left out of pocket.

On the building side, for existing heat networks, options to decarbonise by switching to lower temperatures are only going to be effective and useful, if they are accompanied by an upgrading of all the building fabric, and that the heat network operators are not held responsible for that.

For these significant emissions reductions by 2030 and 2035, it is important to recognise that not everything that makes a heat network efficient is within the control of the heat network operator. As we say in our answer to Q.4 commercial structures mean operators do not always own buildings or networks therefore cannot make changes.

Other support that is needed to help existing networks improve their efficiency, is funding, and also, for example, the 90% district heating rates relief from the business rates for networks connecting to renewable sources needs to be extended for far longer, and we suggest 2032 at the very least.

Chapter 4: Guiding development

8. What are your views on the Building Hierarchy proposed and its use to prioritise delivery on the ground and use in developing heat networks policy and regulation? (Please also include if you have any evidence

relating to the inclusion of multi-owner/multi-tenancy buildings and historic buildings.)

Technically, hierarchy does not matter in the bigger picture however, we feel that there is perhaps too much emphasis on new build and not enough emphasis on the second priority of non-domestic and commercial above a certain size. These are the properties that will drive heat network deployment, providing anchor loads and offtake surety.

If we look at this in terms of the statistic that 80% of our existing buildings will still be here in 2050, this is the area that needs to be prioritised. The existing buildings need to follow on very quickly from the new build.

It is a huge risk that nothing will happen with these buildings until 2030 or beyond, when they could make a difference to reaching the targets. This also applies if extending the building assessment reports to these types of building.

We would also like to see the building hierarchy priorities extended to domestic houses, particularly historic and older buildings and recognition that heat networks are not only intended for dense city centres. There needs to be a wider appreciation that they can be suitable solutions for other building archetypes.

9. What in your view is the right approach to ensuring there is sufficient demand assurance?

We have stated throughout the Heat Networks Bill progress through Parliament that a missing component of the Bill was an obligation to connect. We are aware that the UK Government is considering mandating connections to heat networks as part of its zoning plans and feel that the Scottish Government should do the same. Local authorities should have the power to require buildings with a significant heat load to connect to a district heating network where such a network can offer heating at a competitive cost.

We are aware that there will be a forthcoming consultation on using existing powers to strongly encourage anchor building owners in heat network zones to connect to and use local schemes and recommend this happens quickly.

Another suggestion to drive connections would be to call for an air quality threshold for all buildings with a decreasing limit so they must find an

alternative. An early pledge to join district heating (even if it does not yet exist in that area) would exempt them.

It would also be useful for industry to have a clear statement of intent from the Scottish Government as to the use of hydrogen for heating. There are many concerns that properties with gas boilers will remain as they are due to the expectation that hydrogen will be replacing natural gas and there will be hydrogen-ready boilers in homes and that heat networks are not a credible replacement.

Chapter 6: Capital programmes and delivery mechanisms

10. What role should the Heat Network Pre-Capital Support Unit play in supporting project development?

This will be useful to have a specific project pathway from the outset. Project development could be supportive in a similar way as the District Heating Loan Fund, for example, to provide technical support.

11. What types of capital support would help to support the development of low and zero carbon heat networks and attract private sector finance? Please explain your views and provide evidence if possible.

A soft loan that becomes repayable once levels of profitability are reached. Revenue support is more important than capital right now due to the imbalance with the high carbon counterfactual and the high costs of electricity.

However capital support is still important so a successor to or a continuation of LCITP grants. There is likely to be a need for very low cost or grant support for the initial pipe network infrastructure. Private investors will struggle to make sufficient return without capital support to cover some of the large initial infrastructure outlay.

Chapter 7: Monitoring and reporting

12. What are your views on the proposal to gather data and wider information about heat networks in Scotland? Please also state if you think there anything missing from the proposed list for data collection.

We support this suggestion. We agree that data collection is important, not only to establish a baseline but also to report against targets. We are glad to see that the Scottish Government intends that this is not an extra burden for heat network operators. We have no suggestions on further additions to the

proposed list for data collection, just to emphasise however that this does not cause additional burdens for those operating heat networks, as stated above.

Part 2: Heat Network Regulatory Policy Options

13. What are your views on other owners (or persons with interest) of nondomestic buildings - beyond Scottish public bodies - being required to produce a building assessment report for their buildings?

We strongly agree with this proposal. There is no guidance yet, however, on the detail about what will constitute a building assessment report, so we ask for clarity here and whether there are any links between the reformed EPCs and the building assessment reports. Perhaps there could be an exclusion on small buildings in some circumstances.

It would also be helpful to have clarity on what Scottish Ministers and/or local authorities can do with the building assessment reports that they receive – for example, the data could be made public or shared with zone permit holders to increase the value of these reports.

14. What are your views on whether there should be prioritisation of building assessment reports based on certain building attributes in order to expedite data on potential anchor loads?

We are aware that the EPC is prioritised in this way, with this process exempting non-domestic buildings of a certain size. We agree that there should be prioritisation and, again, this should not burden small buildings. The priority is on capturing larger buildings, especially for the next few years. This would enable small local shops to be exempted, while large buildings such as 3000 sq. ft offices, hotels, leisure facilities, etc. would be captured. Criteria should be set by size.

15. How can we ensure proportionality in a licensing system, in particular in the application and determination processes, licence conditions and fees? Please be as specific as possible.

Proportionality could be ensured by size. Essentially, any fees that the heat network operators must pay will be passed onto the consumers. If the fees or part of the fees are proportionate to the number of customers supplied, then that allows larger heat network operators to share it over more customers. This appears both proportionate and reasonable.

16. Which heat network projects should be exempt from the requirement to hold heat network consent? Please provide evidence alongside your answer.

Our feeling is that smaller heat networks should be exempt from the consent process. Smaller networks would only need to comply with certain rules and give an annual return, which is how the proposed system in England is going to be designed.

In the electricity regime, there are two ways of looking at this: in terms of capacity or numbers of customers supplied (so, if only 100 customers supplied, then that would count as a small network, for example).

Retrospectively going back and consenting many small, existing projects would not be an efficient use of resources.

17. Are there particular types of heat network for which only limited information should be required in the consent application? If so, please set out your views on what types of heat network and why?

The Heat Networks Delivery Plan states that the burden might be limited for those who may be getting scrutinised through systems such as the planning regime. This would be an obvious crossover/interface point in terms of engagement, to save resource. For instance, if public events relating to planning permission being consented for a new development that includes a heat network are being held, it would not be proportionate to then require something similar on the heat network specifically.

As we said in our answer to Q16, smaller heat networks should provide limited information, or be exempted from certain processes.

18. The Heat Networks (Scotland) Act 2021 makes provision for community engagement and we intend to publish guidance in relation to this.

What, in your view, would constitute effective and meaningful community engagement?

We feel this is an important point - community engagement is key to the success of the Act and heat networks going forward, especially considering a potential obligation to connect to a heat network.

We do not think that using the existing planning regime processes where there is a minimum requirement for community engagement relating to the size of the development is robust enough. Transitioning to heat networks needs to

take a consensual approach. This is a different approach than usually taken for community consultation and engagement.

We feel it would be useful if there was clearer guidance on planning for heat networks.

19. What key factors should determine the duration of the heat network zone permit?

The key factor that determines duration is payback terms. New heat networks require a large amount of capital investment, so they need a longer permit period to allow them to recover that cost, compared to a heat network operator taking over an existing network.

In business terms, the key factor that determines duration is the importance of the commercial case and its' link to the certainty of cost to customers.

20. How can the interests of both the customer and the network operator best be balanced in heat network zones with heat network zone permits?

We had envisaged the use of permits was one of the ways that the Scottish Government could effectively provide consumer protection type arrangements. We understand that operator retention of their concession (permit) is dependent on the provision of a reasonable standard of customer service and meeting other obligations to an agreed level. Permits confer a degree of protection both to the customer and heat network operators, who get the right to run it provided that they have met the standards and that they continue to act in the best interest of their customers. It is our view that this does not need extra development as the regulations are already adequate.

21. What measures, if any, should regulatory or support systems take to encourage inter-seasonal thermal storage to achieve wider societal benefits? Please explain.

We can see the potentials in this area, where large-scale borehole arrays might be used to store heat during summer periods for use in the winter, at the sort of scale that they could be used by heat networks or community groups. However, this raises questions such as: who owns it, maintains it and charges for it? We are unsure about how this would be regulated. We note that the Scottish Government intends to research this and await the outputs with interest.

22. Do you have views you would like to express relating to parts of this consultation which do not have a specific question? If so, please elaborate.

We had hoped that, with the publication of the draft Heat Networks Delivery Plan, that it would contain some first steps to get the heat networks sector moving forward. However, we are concerned that the administrative processes it contains may be a burden to new heat network operators. We are also concerned that it contains no incentives yet increasingly more regulatory processes. We feel there could be better streamlining of processes to help reduce the burden.

We recommended the streamlining of processes as part of our engagement on the Bill. While zoning is more high level and consents more specific, work done at the point of designating a heat network zone could allow fast tracking or exemption of aspects of the heat network consent process – particularly for future network expansions.

The Local Authority Cost Strategy is happening much too late – the Delivery Plan states that this is intended to happen in 2024. Work to inform this Strategy needs to be happening now, and iterations of the Strategy should be circulated to local authorities and COSLA. We need to get funding to local authorities well before 2024, for example, for LHEES and zoning.

We also need to bear in mind that heat networks are not just one central, high temperature heat source, they are also 5th generation, multiple heat sources, ambient heat networks, with distributed building level heat pumps. This type of thinking needs to be encouraged when considering zoning. A useful code of practice, in this case, is the latest CIBSE Code of Practice for Heat Networks, which promotes the advent and development of 5th generation heat networks.