

# Energy Saving Trust's response to the Scottish Government's consultation on the Draft Heat Networks Delivery Plan

Submitted on 13 December 2021

## 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.)**

In our opinion, and to the best of our knowledge, none of the proposals set out in this plan could unfairly discriminate against any person in Scotland due to a protected characteristic. It will however be important to ensure that the actual implementation of any of these proposals is as inclusive as possible and this is unlikely to happen without specific interventions to ensure that particular groups have access to the same support and resources as others.

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

In our opinion and to the best of our knowledge, none of the proposals set out in the plan could have an adverse impact on children's rights and wellbeing. In fact, we think that the proposals set out in the plan will have a positive impact on children's rights and wellbeing as they should result in warmer, more comfortable homes and lower fuel bills.

## Chapter 2: Ambition & targets

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

We agree that the 2035 heat network supply target should be informed by the Potential Heat Network Zones: First National Assessment and work carried out to develop Local Heat and Energy Efficiency Strategies (LHEES). As well as this work we believe that the 2035 heat network target should also be informed by progress made towards the 2027 target in 2023 (i.e. at the point of consultation on the 2035 target) together with information about the pipeline of heat network projects at that point. It should also take into account

the modelled likely impacts of the introduction of mandatory connections for certain building types, climate change and fuel poverty targets and progress towards meeting these, and any changes (at UK Government level) to the levies placed on different fuels (gas vs. electricity).

It will be important to ensure that the heat networks developed as a result of the Scottish Government's heat network supply targets are well designed, efficient and well managed to the satisfaction of customers. It will therefore be important that in setting the 2035 heat network supply target, adequate consideration is given to the implementation of best practice, and the support that supply chains will need.

**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?**

Yes, we think that there are particular approaches or measures that could be taken through the Scottish Government's proposals in the Heat Networks Delivery Plan that could reduce the depth and rate of fuel poverty. Specifically, we think that:

- Licencing arrangements could include a mechanism that prohibits charges that are too high. The granting of a licence could, for example, be dependent on overall costs to customers with a requirement that these are at least on par with or less than the counterfactual.
- Public subsidy should be dependent on a reduction in costs for certain customers. Such an arrangement already exists for the Scottish Government's District Heating Loan Fund (DHLF) where the provision of funding for a district heating project is dependent on reduced costs for householders. Analysis of cost reduction would include maintenance costs, replacement costs for equipment including boilers as well as tariff rates.
- The Scottish Government should monitor fixed charges, unit rates, tariffs and pricing structures (including standing charges). This information will help the Scottish Government to understand the role that heat networks play in reducing both the depth and the rate of fuel poverty. We also believe that there should be a mandatory requirement for operators to publish tariffs (including standing charges) for end users. This will help to build confidence in what is actually being paid for and the transparency will allow relevant stakeholders to scrutinise and challenge costs in consumers' interests. Operators do not currently publish pricing

due to commercial sensitivities but if all operators are required to publish tariffs the justification for this argument would be removed.

### 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.**

Energy Saving Trust broadly agrees with the order of the three stages identified in the consultation (1. building assessment and zoning, 2. licensing, consenting and permitting, and 3. transfer schemes) for setting up the regulatory regime. However, as the consultation notes transfer schemes *“will be crucial ..., in terms of ensuring continued supply in the event an operator ceases to operate...”*, and given that people currently served by heat networks need such protections in place now we therefore think that consideration should be given to developing transfer schemes in parallel with the other two stages.

**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.**

Energy Saving Trust supports the Scottish Government’s proposal that *“licence holders who operate existing networks in Scotland will be required to prepare then implement a Heat Network Decarbonisation Plan”*. The availability of appropriate funding/finance and technical support to support the decarbonisation of existing heat networks is a key challenge, particularly in relation to older building stock. In this context we believe there is scope for the introduction of match grant funding for upgrading and decarbonising existing heat networks. This would help to overcome some of the existing issues with inefficient ‘legacy’ schemes helping to minimise heat losses and provide better outcomes for customers.

It will also be important that available funding/finance/support is available to maximise building insulation levels and cover “internals” such as replacing existing radiators with larger ones or installing individual heat pumps to boost low temperature supply from the network. Where “internals” do need to be replaced this will cause disruption for residents which will also present challenges.

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

As noted in our response to question 6 above we believe there is scope for the introduction of match grant funding for upgrading and decarbonising existing heat networks. This would help to overcome some of the existing issues with inefficient 'legacy' schemes helping to minimise heat losses and provide better outcomes for customers.

We also think that the availability of technical advice and support will be crucial to helping existing networks to improve their efficiency and switch to low or zero emission heat generation – ensuring that operators are able to determine which technologies are most appropriate for their circumstances. This could include a one-stop-shop where heat network operators can go for technical advice, and/or the development of peer-to-peer support networks

#### **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.)**

Energy Saving Trust supports the Building Hierarchy proposed and its use to prioritise delivery on the ground and use in developing heat networks policy and regulation.

The consultation asks specifically about whether homes should be included within these groupings. While we do not believe that existing private homes (for our views on new build homes see our response to question 9 below) should be required to connect to heat networks we do believe that they should be encouraged to do so. If householders are to make informed choices about whether to voluntarily connect or not, and if the Scottish Government is to maximise the numbers of buildings connecting voluntarily it will be important to ensure that appropriate information, impartial advice and support is available. This could build on the information and advice already provided by Home Energy Scotland and should include information that allows residents to better understand what a district heating network is and the relative pros and cons of joining one as opposed to using alternative heating methods. It will also be important that advice providers are able to make consumers aware of what they should look out for when considering joining a district heating network and the questions they should ask. In the case of social housing, it would be expected that the social housing providers would be able to fulfil this function under their existing duty of care to their tenants.

Pre-connection, all efforts should be made to make sure all buildings that are to be connected have maximum levels of insulation and energy efficiency. Impartial information, advice and support should be available to facilitate this.

Post-connection support should also be provided to customers (particularly householders), including behavioural advice around heating controls to ensure that systems work optimally – this should ensure customer satisfaction with the heating provided by heat networks and ensure benefits are maximised (fuel bill savings, carbon savings, etc.).

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

Energy Saving Trust welcomes the fact that the Scottish Government is committed to consulting on proposals to *“introduce mandatory connections for large and publicly-owned buildings; and/or use new powers under section 15 of the Non-Domestic Rates (Scotland) Act 2020 which could potentially be used to de-risk investment and drive net zero behaviour, including connections to heat networks”*. Without a requirement for these types of buildings to connect it is unlikely that there will be sufficient deployment of heat networks to meet Scottish Government targets.

In our recent response to BEIS’ consultation on heat network zoning we supported their proposal that *“All new buildings, large public sector buildings. Large non-domestic buildings and large residential buildings which already have communal heating, or are undergoing major refurbishment are required to connect”* in a heat network zone. We think that the level of ambition for Scotland should be at least as ambitious as those set by BEIS.

As we noted in our response to the Scottish Government’s scoping consultation on a New Build Heat Standard earlier this year we support the Scottish Government’s proposal that *“new buildings be required to be designed and constructed so as to connect to an existing heat network, where that development takes place within a Heat Network Zone”* or otherwise demonstrate that it is not an *“effective solution for the building owner or for the wider community”* in which case an alternative zero direct emissions heating system would then be permissible in complying with the Standard.

We also believe that if new buildings are built in a heat network zone but not connected to the existing heat network (because it is not an effective solution of the building owner or the wider community). It will be important that these buildings are ‘future proofed’ for future connection to ensure that, at the end of the lifetime of the heating system installed at the point of build, the building or home can easily and cheaply be connected to the existing heat network should the building/homeowner (or housing provider) decide that this was the best option for them. Such ‘future proofing’ requirements are already in place in other countries where heat networks are more prevalent.

## Chapter 6: Capital programmes and delivery mechanisms

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

Energy Saving Trust very much supports the Scottish Government's intention to establish a Heat Network Pre-Capital Support Unit this year. We look forward to being involved with the Unit as it develops.

We agree with the roles outlined in the consultation document ("provision of enhanced support to the public and private sector, including support undertaking the necessary feasibility studies and working with potential partners to identify and bring forward projects") and welcome the fact that the successor to the LCITP will offer enhanced pre-capital support including helping with options appraisals, business cases, financial expertise, technical expertise, legal expertise, project management and procurement expertise.

### **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.**

We see a continued role for the district heating loan fund as well as grant support such as LCITP. Grant funding coupled with low interest lending will be vital to mitigate the initial investment risk for heat network developers (particularly in the absence of non-domestic RHI support). The district heating loan fund (DHLF) is a dedicated heat networks fund managed by the Energy Saving Trust on behalf of the Scottish Government. To date the scheme has funded 54 projects through provision of £20M of loan funds. As the loan fund is 'unsecured' debt finance it can work alongside other lending to co-fund larger projects. At this stage of market transformation in Scotland when district heating is perceived as too high a risk for mainstream lenders this type of funding together with that of grant support for projects remains vital. Grant funding (both development and capital) can help to significantly 'de-risk' projects at the outset. In this context, we very much welcome the 90% relief from non-domestic rates until 2024 for networks that run on renewable sources (provided for in the Non-Domestic Rates (District Heating Relief and Renewable Energy Generation Relief) (Scotland) Amendment Regulations 2021). Heat networks require a degree of funding certainty at the outset as it often takes time to connect potential customers and heat loads to generate revenues from heat supply.

The fact that loans provided under the DHLF are unsecured means that other lenders can come in and take debt security. This together with the fact that projects benefiting from

DHLF loans are subject to a degree of de-risking through preliminary due diligence makes these projects more attractive to the private sector.

Finally, we think that there is an urgent need to fill the gap left by the cessation of the non-domestic RHI in order to provide long term fiscal stimulus to district heating schemes. While we recognise that there is unlikely to be sufficient funding available for the Scottish Government to introduce a directly equivalent scheme in Scotland, we do believe that there could be scope to introduce a scheme that would provide payments for 'useful heat' to district heating schemes over a period of c.5years (possibly longer). This would help to provide certainty and extra security for schemes in the early years of development – these years tend to be the most challenging ones for new district heating schemes. It would also encourage schemes to connect additional stakeholders, maximise efficiencies and minimise heat losses.

## **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.**

Energy Saving Trust supports the proposals to gather data and wider information about heat networks in Scotland. In addition to the data listed we think it is important that the Scottish Government also monitors fixed charges, unit rates, tariffs and pricing structures (including standing charges). This information will help the Scottish Government to understand the role that heat networks play in reducing both the depth and the rate of fuel poverty.

In this context we also believe that there should be a mandatory requirement for operators to publish tariffs for end users. This will help to build confidence in what is being paid and the transparency will allow relevant stakeholders to scrutinise and challenge costs in consumers' interests. Operators do not currently publish pricing due to commercial sensitivities but if all operators are required to publish tariffs the justification for this argument would be removed.

## **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?**

Energy Saving Trust strongly supports the Scottish Government's proposal that the requirement to undertake a building assessment report is extended to other non-public

sector non-domestic building owners. This is because, as the consultation notes, *“in some strategic heat network zones – particularly those in city or town centre locations – there may be other non-domestic buildings that would be suitable anchor buildings and may be needed to enable the development of a heat network”*.

**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 think that the prioritisation of building assessment reports based on certain building attributes is a sensible idea although care should be taken to ensure that certain buildings do not fall through the net. It is important to maximise the data provision for all buildings.

**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.**

We very much support the Scottish Government’s commitment to developing a licensing system that is fair and proportionate. We think that a ‘licensing lite’ approach in relation to fees would be sensible i.e. an approach under which smaller schemes pay smaller licence fees. We agree that it will be important to ensure that certain conditions are common regardless of the licence (for example complying with technical standards) and it will be vitally important that consumers (particularly householders) receive equal protection and outcomes (for example standards of service), no matter how small the schemes they are connected to are. In this context we think that there may be scope to provide additional support to smaller schemes where necessary to enable them to meet necessary licence conditions.

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

There may be certain cases where a small hub (such as an NHS estate) provides heat to a small number of buildings owned by NHS estates with no possibility of expansion or connecting to other third parties. If the hub was to connect to third parties in the future this could trigger the consent process.

**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?**



We think that there may be a case for very small schemes to be required to provide only limited information. This would help to ensure that the process was proportionate and not too onerous for particularly small schemes. There are, for example, existing district heating systems serving very small numbers of properties (see for example: <https://www.kirkennan.co.uk/blog/ashp> - a district heating system serving 2 holiday cottages and an additional cottage).

**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?**

Energy Saving Trust supports the Scottish Government's intention to publish guidance in relation to community engagement. As the consultation notes *"it is imperative that communities are involved in the design [of heat networks] and have the ability to inform decision making"*. We have considerable experience of community engagement in energy projects as a result of our work through Local Energy Scotland<sup>1</sup> to deliver the Scottish Government's Community and Renewable Energy Scheme (CARES).

Community engagement needs to be undertaken early in the development of projects so that input can be provided by local communities who understand their community and its needs.

The Scottish Government's good practice principles for community benefits from onshore renewable energy developments provides some high-level principles around community identification and engagement (see: <https://www.gov.scot/publications/scottish-government-good-practice-principles-community-benefits-onshore-renewable-energy-developments/documents/>). The approach taken to develop guidance with the support of a steering group representing the key actors could also be used to develop guidance for community engagement in heat network development.

Energy Saving Trust developed a Local Energy Plan toolkit through our work on the EU and Scottish Government funded Delivering Community Benefits of Civic Energy (COBEN) programme. The mobilisation stage of this resource focuses on community engagement (see: <https://localenergy.scot/resources-overview/community-led-local-energy-plan->

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<sup>1</sup> Local Energy Scotland is a consortium made up of Energy Saving Trust, Changeworks, The Energy Agency, SCARF and The Wise Group.

[toolkit/](#)) and its contents may be useful in developing guidance for community engagement in the development of heat network projects.

Finally, as heat network proposals develop, local communities could act as advocates for schemes. To allow this to happen we would propose that schemes like CARES provide access to independent professional advisors who can complete technical, legal and financial due diligence on key project documents to allow the community to act as ambassadors with confidence.

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

We think that the makeup of particular zones should have a bearing on the provision of any heat network zone permit. In particular we think there will be a need to ensure that zones with more households in should be reviewed more frequently than those with few/no households. This is because householders connected to a monopoly provider could be more vulnerable than large business or public sector customers. The permit should be sufficiently long to justify the business case investment but not long enough to encourage complacency from operators. 20-25 years would be reasonable in most cases with perhaps some flexibility in instances where the business case was weaker.

**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 think that one way of ensuring that the interests of both the customer and the network operator can best be balanced in heat network zones with heat network zone permits is through regular monitoring and review points to ensure best value.

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

Additional financing could be provided to encourage exploration of inter-seasonal storage potential both for new and existing schemes. This could take the form of exploring underground aquifers or storing heat underground in rock strata.

**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.**

No, we do not have any additional views that we would like to express relating to parts of this consultation which do not have a specific question.