

Heat Networks (Scotland) Bill

Fairer Scotland Duty

March 2020

FAIRER SCOTLAND DUTY

<p>Title of Policy, Strategy, Programme etc.</p>	<p>Heat Networks (Scotland) Bill</p>
<p>Summary of aims and expected outcomes of strategy, proposal, programme or policy</p>	<p>Following the passage of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, Scotland has set a statutory target for net-zero greenhouse gas emissions by 2045, with interim emissions reductions of 75% (by 2030) and 90% (by 2040).</p> <p>This move follows the First Minister’s recognition of a global climate emergency. In response, the Scottish Government set out the initial action it would take, as part of the Programme for Government 2019-2020.</p> <p>These commitments included the introduction of a Heat Networks (Scotland) Bill in 2020. Heat networks are a form of infrastructure that consists of pipework, through which heated water or steam provides heating (and hot water) to buildings. Heat networks are generally more efficient than individual gas boilers and can also be run from a range of sources, including renewable technologies such as heat pumps or solar thermal. As such, heat networks have the potential to reduce – or remove – the emissions caused by heating our buildings.</p> <p>The Bill aims to contribute to Scotland’s climate change targets by increasing the number and scale of heat networks in Scotland, by:</p> <ul style="list-style-type: none"> • Creating a Heat Networks Licensing system to ensure that those developing and operating the infrastructure are suitable to do so. A Licensing Authority will administer and enforce the system; • Creating a Heat Network Consent system to ensure that local factors and assets (such as fuel poverty, or waste heat sources, respectively) are considered before approving new developments; • Enabling the identification of Heat Network Zones – those areas where a heat network is the appropriate heat decarbonisation solution; • Enabling the award of long-term but time-limited Heat Network Zone Permits – an exclusive right to operate a heat network to a single organisation within a Heat Network Zone;

	<ul style="list-style-type: none"> • Provide heat network operators with a right (akin to a necessary wayleave) to have a physical connection (but not a contractual agreement to sell/buy heat) between the infrastructure and certain buildings with high heat demand within a Heat Network Zone; • Conferring new rights on Heat Networks License Holders to facilitate the development and maintenance of the infrastructure; • Introducing Transfer Schemes to provide a ‘Supplier of Last Resort’ and a means to fairly re-tender Heat Network Zone Permits; and • Requiring public sector building owners to assess the potential for their estate to connect to a heat network, in order to increase the robustness of Heat Network Zones. <p>Through these measures, the Scottish Government expects to:</p> <ul style="list-style-type: none"> • attract greater investment in heat networks; • increase consumer and supply chain confidence in this emerging market; and • reduce fuel costs for households and businesses, thereby contributing to Scotland’s statutory targets to eradicate fuel poverty and making our businesses more competitive.
<p>Summary of evidence</p>	<p><i>KPMG: Evidence assessment for the implementation of heat networks regulation in Scotland</i></p> <p>In 2019, the Scottish Government commissioned KPMG to estimate the potential impacts of the Bill on consumers, as well as on public and private sector organisations.</p> <p>The report¹ concluded that heat networks could provide fuel savings of up to 36%, with a median potential saving of around 17% or 1.29p per kWh. In the right circumstances, therefore, heat networks can reduce heating costs for householders.</p>

¹ Scottish Government Evidence Gathering Report: Evidence assessment for the implementation of heat networks regulation in Scotland, KPMG 13 December 2019

Using a high-deployment scenario for heat networks, the KPMG research found that potential aggregate consumer bill savings are estimated at £80 million per year by 2050 (in 2019 prices).

Further to this, there has been many positive reports of how social landlords operating heat networks can tackle fuel poverty, as set out in the case study below.

EST research

To support the development of the Bill, the Scottish Government commissioned EST to look at the profile of the Heat Network Sector in Scotland and comparison to the UK Sector as a whole.

They found that heat network customers in Scotland are more likely to be income deprived:

- Heat network customers are more likely to live in an income deprived area than non-heat network customers. 67% of the data zones that contain heat networks are in the most income deprived areas (deciles 1 – 5) compared to 48% of data zones that do not contain heat networks;
- Also, heat network customers are less likely to live in high income areas than the Scottish average: only 9% of data zones that contain heat networks are in least income deprived areas (deciles 9 and 10) compared to 22% of data zones that do not contain heat networks.

They also found that heat network customers in Scotland are more likely to live in areas with high levels of health deprivation compared to non-heat network customers, with 67% of data zones that contain heat networks being located in the most health deprived areas (deciles 1-5).

From this analysis, it is reasonable to conclude that heat network customers in Scotland are more likely to be considered as 'vulnerable customers'.

Finally, the research noted that heat network customers in Scotland are also more likely to live in areas of low employment compared to non-heat network customers. The report showed that 67% of Data Zones with heat networks are in the most employment deprived deciles (deciles 1 – 5) compared to 48% of data zones that do not contain heat networks.

	<p>From the evidence it would appear that a large number of heat network customers live in social housing and in areas of high deprivation. Given that heat networks are most viable in heat- and population-dense areas, such as social housing, it may be expected that those in lower income deciles are more likely to benefit from the fuel cost saving that heat networks can provide².</p> <p>Written consultations</p> <p>The Scottish Government has consulted extensively on heat network regulation, with two dedicated consultation documents^{3 4}.</p> <p>A full, independent analysis of responses to each of these consultations has been undertaken^{5 6}. Some issues raised are relevant to the Fairer Scotland Duty:</p> <ul style="list-style-type: none"> • There was general agreement that the Scottish Government should give thought to how the Bill could protect groups of people who may be more vulnerable to the impact of fuel poverty. • There was some concern that the heat networks market is unregulated and an acceleration in their deployment could have adverse effects on certain groups – for example, should provision not be in place in the event of outages. Some respondents recognised the Scottish Government could not legislate over consumer protection but suggested that it should consider how else it might mitigate such risks.
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² [Scottish House Condition Survey: 2017 Key Findings](#), the Scottish Government, December 2018.

³ [Consultation on Heat and Energy Efficiency Strategies, and District Heating Regulation](#), the Scottish Government, January 2017.

⁴ [Scotland’s Energy Efficiency Programme: Second Consultation on Local Heat and Energy Efficiency Strategies, and Regulation of District and Communal Heating](#), the Scottish Government, November 2017.

⁵ [Consultation on Heat and Energy Efficiency Strategies, and District Heating Regulation](#), Why Research, November 2017.

⁶ [Energy Efficient Scotland: Analysis of Second Consultation on Local Heat and Energy Efficiency Strategies, and Regulation of District Heating](#), Why Research, April 2018.

Case study

As part of a 2015 review of its communal heating system, Islington Borough Council found that:

- The communal heating system consistently used less energy than an individual heating system by a range of 7.5% to 11% and savings were passed on to residents;
- Communal heating reduced the risk of illnesses associated with condensation or dampness which can have significant negative health impacts, especially for the very young, the elderly and those with long term health conditions;
- Tenants could budget more easily which helped to address the impact of fuel poverty on vulnerable and low income residents and helped to mitigate the worry of heating costs;
- Heating and hot water costs were included in the monthly service charge spreading the cost across the entire year as opposed to just the winter months when there was increased heat demand;
- Despite communal heating systems requiring significantly higher up front capital investment, their lifetime costs were lower than where individual heating systems were installed.

Job creation and skills

The Institute for Public Policy Research (IPPR)⁷ states that heat networks can support an estimated 81,000 jobs and up to £22 billion of additional capital investment, on a GB-wide basis.

In addition to this, Scottish Renewables “Piping Hot: building Heat Networks to Tackle The climate Emergency”⁸ highlights that local economies can receive a boost from heat network investment and that civil engineering (the digging of trenches and the laying of pipes) accounts for roughly 40% of a network’s capital costs, often using skills that are sourced locally.

⁷ [Piping Hot: The Opportunity for Heat Networks in a New Industrial Strategy](#), the Institute for Public Policy Research, March 2017.

⁸ [Piping Hot: Building Heat Networks to Tackle the Climate Emergency](#), Scottish Renewables, November 2019.

Summary of assessment findings

The assessment shows that, overall, the Heat Networks (Scotland) Bill provides the potential for some householders in Scotland to benefit from reduced fuel costs and that there is reason to believe that those with lower income are more likely to benefit from the Bill.

The findings of the assessment have been taken into consideration during the drafting of the Bill and the Scottish Government considers that its provisions will support the creation of a Fairer Scotland. For instance:

- **Heat Networks Zones** will be identified by building on a socio-economic methodology that considers both carbon savings and the expected impact of a proposed project on local fuel poverty rates⁹.
- The **Heat Network Consent** process will provide a further safeguard in relation to fuel poverty, by providing the Scottish Ministers with an opportunity to scrutinise the expected impacts of a new heat network before it is approved to proceed.
- Providing new **powers for license holders** will enable heat network operators to access land which will allow them to respond more quickly to outages. This is particularly important for vulnerable customers as a loss of heating and hot water is of physical and psychological detriment to health.

However, we are aware that care must be taken to carry out any work in a considerate way and the Bill therefore requires license holders to work together with land owners and communities to limit disruption wherever possible.

⁹ [Guidance on Strategy Level Socio-economic Assessments: Draft Methodology](#), the Scottish Government, February 2019.

	<p>Mitigating Actions</p> <p>However, the assessment also found risks which the Bill may present – particularly regarding consumer protection – and the following mitigating actions will be taken by the Scottish Government:</p> <ol style="list-style-type: none"> 1. We will work with Heat Trust – the industry-led consumer standards scheme – to increase membership in Scotland. This will include membership of the scheme being a condition of funding under our District Heating Loan Fund (DHLF) and Low Carbon Infrastructure Transition Programme (LCITP). 2. We will work with the Energy Consumer Commission, once established, to create a mechanism for heat network customers to compare their heating costs with other networks and other forms of heat supply. In addition, we will request the devolution of consumer protection in relation to heat networks, and in the meantime will continue to press the UK Government to introduce consumer standards for heat networks. 3. We will work with our partners, the Energy Saving Trust (EST) to expand and upskill the heat network supply chain in order to meet current and future demand. Additionally, during the development of regulations regarding Heat Networks Licence conditions, we will consider whether requirements to use local contractors (where available), should be included.
<p>Sign off</p>	<p>Name: Sue Kearns</p>  <p>Job title: Deputy Director, Consumers and Low Carbon Division</p> <p>Date: 14 February 2020</p>



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