



**ECONOMY, ENERGY AND FAIR WORK COMMITTEE**  
**HEAT NETWORKS (SCOTLAND) BILL**

29 May 2020

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## **Heat Networks (Scotland) Bill**

### **1. Which part of the Heat Networks Bill is of most relevance to you or your organisation, why, and what do you consider its impact will be?**

We recognise the scope of this Bill is to accelerate the adoption of heat networks over individual heating systems in Scotland both for newbuild schemes and as part of a heating improvement package in the regeneration of existing housing areas. We also note the importance of the potential of this operational framework to protect consumers going beyond the more general principles of consumer protection as recommended by the CMA’s Heat Networks market study in 2017 – “*comparable level of protection to customers of gas and electricity in the regulated energy sector*”<sup>1</sup>

We recognise the practical limitations and the challenges of meeting the ambition for this policy, that moving the market from less than 1% of dwellings presently in Scotland (23,000) of mostly fossil fuel derived heat networks (mains gas), to a position in 2032 where heat networks will be a significant contributor to the target of 35% of heat for domestic buildings being supplied using low carbon heat technologies. Twelve years is not a long time, for existing and future heat networks,

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<sup>1</sup> <https://www.gov.uk/government/publications/heat-networks-advice-for-customers-and-the-industry/heat-networks-market-study-summary-of-final-report>

to be able to contribute to this target; the barriers to deployment need to be mitigated; consumers need to be protected; and the technologies being deployed from 2020 onwards must be low carbon to fulfil this aim.

We are encouraged to note the focus on fuel poverty “*In the right circumstances, heat networks can also reduce heating costs for householders.*” and “*ensuring that new heat networks develop where evidence shows that they can reduce fuel costs for householders*”. This appears to be an encouraging commitment to co-design this policy alongside the Scottish Government’s commitment stated in its fuel poverty Act<sup>2</sup>. However, we would like to see a more robust link to that policy, the Government’s Fuel Poverty Strategy is still in development and it is important that this policy be subject to some scrutiny via the statutory Scottish Fuel Poverty Advisory Panel as defined under s.14 of that Act.

**Are you content with the definition of heat networks used in section 1 of the Bill? (If not, please elaborate.)**

We understand the need to differentiate between a district heat network, and a communal heating system. We recognise that licencing, concessions and how an operator of last resort might be arranged, might be quite different between these two service arrangements.

There are many examples across Scotland, particularly in mixed purpose housing schemes operated by registered social landlords where sheltered/very sheltered flatted homes and aged person units are situated within the boundary of the same site alongside general needs housing. In these cases, the same heat plant is serving many different and discrete building units. The ownership of the heat plant and its operations can be administered by a third party under a service contract, they can also be operated by an arm’s length management organisation or wholly owned and operated by the landlord.

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<sup>2</sup> Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act 2019

There needs to be a dimension to the definition of the “district heat network” and the “communal heating” system that goes beyond that as defined by its physical geography. In the situations where a housing association’s mixed purpose housing scheme has its heating and hot water service delivered by an external utility who is responsible for the maintenance and running of the plant and meeting all residents’ needs, then the two proposed approaches to defining the types of heat network appear to fit. Where the landlord is also the operator and that those operations span many discrete building units on the same housing scheme, then it becomes difficult to refer to this as a district heating scheme just because it serves more than one building, in many practical terms, this arrangement would be referred to as a communal heating system.

If heat loads were to be added later to the network which were extraneous to the communal system’s original purpose, e.g. commercial units or leisure facilities, then the definition of district heat network would be better suited. Until that point, if the heat load has a single purpose and serves a single client regardless of the number of sub-divisions to different building units, then it would probably be best referred to as a communal heating system.

**2. Previous consultations have identified different priorities for this legislation – including transition to low-carbon or renewable energy, tackling fuel poverty, and ensuring consumer protection. To what extent do you think such priorities are reflected – and balanced – in the Heat Networks (Scotland) Bill?**

The Bill as it is currently structured does focus some attention on the capacity to tackle the low carbon transition, s.5(4)(b) “..*minimises greenhouse gas emissions..*”. We would suggest that s5. **Heat networks licence applications** does need to have a provision for the licensee to demonstrate their capacity to tackle **fuel poverty** and matters relating to **consumer**

**interests.** Some of these matters could be tackled under the provisions of s6. **Heat networks licence standard conditions**, and in particular s.6(8)(a) – “*the interests of users of thermal energy supplied by means of a heat network*”. It is important that fuel poverty and consumer protection matters are firmly on the face of the Bill.

We would caution against the use of RdSAP/SBEM as a robust method for determining space and water heat loads? This is covered extensively in our research on the domestic and non-domestic energy performance certificate process in Scotland, see “6.7 Technical Issue: District and Community Heating / Combined Heat & Power”<sup>3</sup>

The CMA (2017) report noted “*when developers are considering installing a new heat network, they should compare the price that heat network customers would pay based the whole life costs of the network to the price if customers were supplied by gas (or electricity). This should include the choice of design of heat network, where a heat network is the preferred solution*”. We would add to this that in Scotland, such comparisons for consumers should be cognisant of the Scottish Government’s commitment to different enhanced heating regimes<sup>4</sup> for understanding the different needs of vulnerable households.

Consumers should also be able to annually compare the costs from modelling alternative conventional heating systems using the 6-monthly updated safeguard tariffs for mains gas and electricity. Metering data from their heat network operator would ensure that this was a like for like real consumption comparison of what their annual heat load would have cost using a reference gas boiler or a heat pump.

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<sup>3</sup> <https://www.gov.scot/publications/review-domestic-non-domestic-energy-performance-certificates-scotland/pages/7/>

<sup>4</sup> <https://www.gov.scot/publications/fuel-poverty-enhance-heating-consultation-scottish-government-response-december-2019/>

### **3. What are your views on the licensing regime as envisaged by the Bill?**

There are many approaches to development of a heat network, business models from the fully third party ESCo approach to LA managed schemes. Unlike the mains gas/electricity market, a heat network operates within an unregulated energy market. With the business risk for the operator and the long-term nature of investor returns for heat networks there is the risk that systems deployed may fail to deliver the energy or heat required. There is a need for regulation, for a national safety net, or 'operator of last resort' to indemnify systems against economic/operational failure. This approach is introduced under Part 7 of the Bill. A scheme such as this would need to be funded from within the industry, and may even be a place where blatant overpricing actions on behalf of system operators could be resolved, and where such a body should have power to assume operational control of the system where market/licence failures cannot be resolved. Consumers and vulnerable customers will be better served by such a provision.

### **4. What is your opinion of the approach taken with Heat Network Zones (see parts 3 and 4 of the Bill)?**

From a LA perspective, this could be considered as an adjunct to the existing local Development Planning and the Local Housing Strategy (LHS) process, however as the Heat Network Zone (HNZ) process would affect all buildings, there would be an additional resource implication for LA's. Bringing together locally all partners for the potential for heat networks would be very useful for scoping this, housing providers, SMEs, developers, local planning, energy suppliers and operators of existing District Heating Schemes (DHS).

Just as gas and electricity networks cross local authority boundaries it is appropriate to consider and plan that HNZ will also do so. We therefore welcome the forward thinking which is apparent in sections 43 to 45. In order to facilitate these future cross-boundary developments. In addition, the ambition of the HNZ needs to extend beyond the political cycles. It can be

difficult for LA's to work together strategically on policies such as this. Local Authorities are often at different stages with committee meeting cycles, strategic priorities, and LHS. Perhaps as with LHS, better to have individual approaches, then look to sharing resources, common procurement to implement/monitor HNZ. LHS has some wording about collaborative working for LA's to achieve LHS<sup>5</sup>

Projecting costs to deliver spanning many Council budget cycles could be problematic e.g. LHS 5-year delivery plan which is under review every two years. 2032 would be a challenging target for any major market penetration of DHS, an individual scheme could currently take as much as 5 years from feasibility to commissioning.

**5. How will the Bill impact on local authorities? (In terms both of the assessment of the suitability of their own buildings and also the power to designate heat network zones)**

Our local authority members have indicated that the Bill introduces the ideas and policy aims trialled under the various Local Heat & Energy Efficiency Strategies (LHEES) pilots into legislation and therefore, it would be appropriate to consider an independent review of the outcomes of these LHEES projects. Many of these projects explored issues such as thermal capacity modelling and how LA's would operate as a local administration body, the powers that would be required by the authority and how licencing could be financed and operated.

There were some concerns that potentially this Bill is creating new duties for local authorities despite inconclusive experience from the LHEES trials. However, in general terms the licencing of heat network operators is welcomed and a regulatory role for LA's will be welcome, if resources are provided. It will be

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<sup>5</sup> <http://www.gov.scot/Resource/0045/00458185.pdf> (page 2, Section 1.8)

difficult to scale within the short time frame of the ambition for this policy.

Within social housing, the heat-with-rent model has mostly been phased out except in situations where sheltered housing is being supplied, this shift away from the ideal of a 'community' based delivery of heat will require a step change in the long-term planning for the residential sector.

**6. Part 6 of the Bill confers powers for the compulsory acquisition of land and wayleave rights; to survey land for the purpose of construction or operating a heat network, and to access land in order to carry out repairs. What do you think of the extent of the powers in the Bill for licensed heat network operators (similar, in some respects, to those of utility companies)? Has a balance been struck with the rights of others (property rights for example)? If not, what would that balance be?**

We have no specific comment to add to this. We recognise the need for reforms to the legislation that supports rights to access and purchase of land in order to affect what should ostensibly be a public good and not disadvantage already vulnerable groups.

**7. Please feel free to provide your views on any other aspects of the Bill or the policy aims underpinning it if not covered above.**

The Dept. Business, Energy & Industrial Strategy (BEIS) currently maintain a source of sub-national data for domestic/non-domestic electricity and gas consumption<sup>6</sup> links to the full range of energy consumption data sets can be found in the sub-national summary document. For domestic consumers, there are some 'experimental' data sets available which will disaggregate this to **full postcode geography** for

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<sup>6</sup> <https://www.gov.uk/government/statistics/sub-national-electricity-and-gas-consumption-summary-report-2018>



gas consumption<sup>7</sup>, and electricity consumption<sup>8</sup>. Consumption data for areas comes from network operators (SGN, SSEN etc.). For individual property units, it would be the supply companies. Perhaps the best route to this data, and to mitigate the cost and resource implications for LA's, would be to rely on the published BEIS data?

## **Alternative Building Energy Modelling Consumption Sources**

- IES modelling<sup>9</sup>, see Glasgow City Council for building performance models.
- REEPS modelling for domestic property types<sup>10</sup>
- HUE tool – Strathclyde University<sup>11</sup>

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<sup>7</sup> <https://www.gov.uk/government/collections/sub-national-gas-consumption-data>

<sup>8</sup> <https://www.gov.uk/government/collections/sub-national-electricity-consumption-data>

<sup>9</sup> <https://www.iesve.com/>

<sup>10</sup> <http://www.gov.scot/Publications/2015/11/2513>

<sup>11</sup> <http://www.esru.strath.ac.uk/Programs/EEff/>