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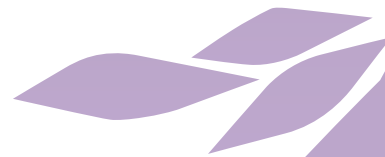
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9th (Session 5)

Economy, Energy and Fair Work Committee
Comataidh Eaconamaidh, Lùth is Obair Chothromach

**Stage 1 Report on the Heat Networks
(Scotland) Bill**



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Economy, Energy and Fair Work Committee

Remit: To consider and report on economy and fair work matters falling within the responsibilities of the Cabinet Secretary for Economy, Fair Work and Culture; matters relating to the digital economy within the responsibilities of the Cabinet Secretary for Finance, and matters relating to energy falling within the responsibilities of the Minister for Energy, Connectivity and the Islands.



<http://www.parliament.scot/parliamentarybusiness/CurrentCommittees/economy-committee.aspx>



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Introduction

Timeline

1. Since 2014, the regulatory environment for heat networks in Scotland has been subject to three working groups and two consultations.
2. In its [Programme for Government](#) on 3 September 2019, the Scottish Government stated its intention to bring forward a Heat Networks Bill—

” *The Bill will introduce regulation of the heat network sector to support, facilitate and create controls in respect of the development of district and communal heating infrastructure in Scotland. Accelerating the deployment of heat networks will help Scotland to decarbonise its heat supply and will contribute to our climate change targets.*
3. The [Heat Networks \(Scotland\) Bill](#) was introduced in the Parliament on 2 March 2020 by the Minister for Transport, Infrastructure and Connectivity. On 10 March 2020, the parliamentary Bureau designated the Economy, Energy and Fair Work Committee as lead committee to consider the Bill. The Committee began taking evidence at Stage 1 on [23 June](#) 2020.

Briefings

4. A [SPICe briefing](#) on the Bill was published on 11 June and the UK Parliamentary Office of Science and Technology issued a [POST note](#) on 29 September.

What a heat network is

5. A term describing both community and district heating, a heat network delivers heat (most commonly hot water or steam) from a central source to multiple users in a local area. It does so via insulated pipes from a central generation point instead of having a boiler in each home and business premises.
6. Such an approach – ideally drawing on renewable energy or recovered waste or surplus heat sources – can be a way of cutting carbon emissions and heating bills for businesses and communities.

What the Bill does

7. In broad terms the Bill seeks to regulate the supply of thermal energy via heat networks, facilitating their development and operation. It is essentially a single purpose Bill. However, the breadth of that single purpose touches on a range of other policy areas e.g. renewables, energy efficiency, fuel poverty, land rights, planning permission, and climate change.

8. The long title of the Bill sets out that its purpose is—

” *...to make provision for regulating the supply of thermal energy by a heat network, and for regulating the construction and operation of a heat network; to make provision about the powers of persons holding a heat networks licence; to make provision about conferring rights in heat network assets where a person ceases operating a heat network; and for connected purposes.*

Policy context

9. According to the [Policy Memorandum](#)—

” *The overall purpose of the Bill is to encourage greater deployment of heat networks in Scotland, in order to help reduce emissions from heating homes and buildings.*

10. Also—

” *The Bill will also contribute towards the Scotland’s target that to deliver 11% of non-electrical heat demand from renewable sources by 2020 and the Scottish Government’s target that 50% of all energy consumption come from renewables by 2030.*

11. It suggested that “*in the right circumstances*” heat networks “*can also reduce heating costs*” and therefore contribute to 2040 fuel poverty targets (that no more than 5% of households are living in fuel poverty).

12. At the launch of the Bill, the Minister for Energy, Connectivity and the Islands stated—

” *...the sector is currently lacking a coherent regulatory framework and the Heat Networks Bill therefore marks the beginning of a transformational change, as we seek to create a supportive market environment for the necessary expansion of heat networks.* ¹

Overview of the Bill

13. The Bill has 8 parts, comprising 85 sections—

- Part 1 defines a heat network and requires all heat network operators to hold a licence. This licence will be issued by a licensing authority. The Bill allows for this licensing authority to be the Scottish Ministers or for the Scottish Ministers to designate another body to carry out these functions;
- Part 2 establishes the heat network consent process for specific projects. Heat network operators will be required to apply for consent to develop new heat networks or to expand existing ones. It interconnects with Part 7;

- Part 3 enables local authorities to designate an area as a Heat Network Zone to encourage a strategic planning approach to the construction of heat networks;
- Part 4 builds on the designation of heat network zones by allowing the Scottish Ministers to award a Heat Network Zone Permit to a sole operator within a specified zone;
- Part 5 places a duty on public sector building owners to assess the viability of connecting their building to a heat network and to report accordingly to the relevant local authority and to the Scottish Ministers;
- Part 6 confers powers on licensed heat network operators to compulsory acquire land; acquire wayleave rights; survey land for the purpose of construction or operating a heat network, and to access land in order to carry out repairs and to replace apparatus;
- Part 7 requires the Scottish Ministers to identify the key assets of each heat network consent application they receive. It also enables the Scottish Ministers to make a transfer scheme in circumstances where an operator ceases to operate a particular heat network;
- Part 8 enables the Scottish Ministers to set fees for the various licenses, consents and permits provided for by the Bill; identifies culpability where an offence has been committed, and makes provision for general and miscellaneous matters.

Climate emergency

14. In April 2019 the First Minister declared a climate emergency, since which time the Scottish Government has: set a net-zero greenhouse gas emissions target; focused on the climate crisis in its budget; and the [Just Transition Commission](#) has made interim recommendations for “*growing an inclusive, net-zero economy*”. Decarbonisation has also been made the primary mission of the Scottish National Investment Bank.
15. It has been suggested that, if successfully developed, heat networks have the potential to play a significant role in green recovery and a just transition.

Committee on Climate Change

16. [The Committee on Climate Change](#) (CCC) recommended that Scotland expand its low carbon heat networks—

District heating schemes require a certain density of heat demand in order to be economic, which means that they are potentially well suited to urban areas, new-build developments and some rural areas. A strategic approach - that considers the whole system as well as local variations in housing - is needed to identify the areas

where low-carbon district heating can be a cost-effective alternative to other low-carbon heating solutions, taking into account the capital and fuel costs as well as wider considerations like householder engagement. Low-carbon heat sources can include waste heat, large-scale (e.g. water-source) heat pumps, geothermal heat, and potentially hydrogen.

Competition and Markets Authority

17. The Competition and Markets Authority (CMA) published the final report in its Heat Networks Market Study in July 2018. This recognises that heat policy is devolved while noting that competition and the regulation of consumer protection are reserved.
18. It noted that "*unlike other comparable services such as gas and electricity networks, heat networks are not regulated*", and recommended to both the Scottish and UK Governments that a statutory framework should underpin the regulation of all heat networks.²
19. According to the [Policy Memorandum](#)—

” *...the Bill is not reliant on devolution by the UK Government and...it is competent to progress without this because it enables any consumer protection powers that may be devolved to be readily incorporated as a condition of licence at a later date.*

UK market framework

20. A 2017 Industry Heat Network Task Force found that challenges for increasing deployment included investment, demand risk, consumer acceptance, and planning. The Department for Business, Energy & Industrial Strategy (BEIS) is due to implement a market framework in 2022 to address these issues at the UK level.

Ofgem

21. In its [Decarbonisation Action Plan](#), published on 3 February 2020, Ofgem committed to working with the UK and Scottish Governments to consider a role in the protection of consumers connected to heat networks.

Scottish Government consultations

22. The Scottish Government’s consultation on heat networks has covered: a scoping consultation in 2016-17; more detailed policy proposals published in November

2017; and inclusions of heat networks as part of the energy efficiency consultation in March 2019.³

Current data

23. There are currently around 830 heat networks, with 25,000 customers, in Scotland. The most recent figure for total heat demand met by heat networks (as of March 2019) is 1% but it is calculated that 6.7% of heat demand could come from heat networks by 2025. Research also found that long-term carbon savings could be in the region of 23% by putting policy measures into legislation.⁴

The Danish experience

24. The Committee asked the Danish Energy Agency (DEA) for its perspective on governance, consents, licensing, and the role of central and local government.
25. Heat networks cover about 50% of Danish heat consumption and two thirds of the households, representing some 17% of the national energy consumption. Fuel sources have changed over time from oil to coal and waste incineration, then natural gas, biomass and solar, and more recently the increasing use of heat pumps—
- ” *This underlines the point that it is the adaptability of heat networks that makes them a low-regret investment for society.*⁵
26. The DEA described the key elements of regulation and governance in Denmark as including—
- “Municipalities” fulfilling the role of heat planning authority;
 - Ownership of distribution and production being divided between local authorities and co-operatives; and
 - The not-for-profit requirement meaning heat network companies were only able to charge “necessary costs”, with the regulator defining and scrutinising those necessary costs.⁶
27. Among the DEA’s points for further consideration were—
- *“Heat networks are considered a no/low-regret policy priority – especially when implemented in a city-wide manner. Heat networks:*
 1. *Are agnostic to the heat source and can therefore adapt to and even enable future technological developments e.g. hydrogen*
 2. *Are the only way to effectively utilize otherwise wasted low-grade energy from industry and the energy sector*

3. *Create local jobs and the skills required should be relatively straightforward from a training perspective, and could be transferable from the natural gas sector*
4. *Are an extensively proven and well-understood infrastructure technology*
5. *Provide a range of positive externalities to the power grid – especially in conjunction with fluctuating energy sources like wind power*
 - *Heat networks are local by nature. It is both possible and important to give local authorities and stakeholders freedom to operate on local conditions and priorities. In Denmark, this was achieved by actively encouraging and supporting municipal and local ownership and planning – in close cooperation with local industries and businesses.*
 - *Like other parts of the energy infrastructure, heat networks are natural monopolies and 30+ year investments. Development of a city-wide project needs strong policy support to succeed – especially in the beginning and given the net-zero timeframe. Denmark used one approach – some aspects of this might be transferable, some might not.*⁷

EEFW Committee’s consideration

28. The Committee launched a [call for written views](#) that closed on 29 May 2020 and to which 33 [written submissions](#) were received along with 10 pieces of supplementary evidence.
29. We took evidence on the Bill at its meetings on [23 June](#), [25 August](#), [1 September](#), [8 September](#), [29 September](#), and [6 October](#).
30. Ideally the Committee would have liked to undertake some visits in order to see heat networks in action. Unfortunately, in light of the circumstances of the Covid-19 pandemic, this was not possible. We did, however, seek an input from the Danish Energy Agency and are grateful for its written contribution; as we are to all those who submitted evidence in writing or contributed to meetings to assist the Committee’s scrutiny of the Bill.

Consideration by other committees

31. On 25 September 2020, the Delegated Powers and Law Reform Committee [reported](#) on the Bill at Stage 1.

Scrutiny

32. Given the complexity, scale and technical nature of the Bill, this report does not cover each and every one of the 85 sections. Instead, it focuses on those particular aspects which interested the Committee and arose from the written evidence and/or were highlighted by witnesses.

Part 1 – Licences

Definitions

33. Section 1 of part 1 of the Bill defines a "heat network" as either a "*district heat network*", or a "*communal heating system*"; furthermore—
- A district heat network is a network by which thermal energy is distributed from one or more sources of production to more than one building.
 - A communal heating system is a system by which thermal energy is distributed from one or more sources of production to one building comprising more than one building unit.
34. It also allows Scottish Ministers to modify or further define the meaning of "*heat network*", "*district heat network*" or "*communal heating system*" by regulation.

Evidence

35. Oral and written evidence argued for amending the definitions to include "*waste heat or ambient heat capture*"⁸, as well as "*shared loop systems*".^{9 10}
36. During a visit to Orkney in February 2020, members of the Committee visited Stromness where a [sea source heat pump feeds local authority buildings beside the harbour](#).
37. The Law Society of Scotland considered the definition "*sufficiently neutral*"¹¹ to address a variety of heat networks. Sarah Jane MacArthur told us—
- ” *Secondary legislation is probably the only way to retain the level of flexibility required to adapt quickly to future markets, given the constraints on parliamentary time...*¹²
38. Scottish Gas Networks (SGN) accepted that the definition might need to be amended over time and technological changes but it encouraged consultation with "*key parties*" prior to any change.¹³

Scottish Government

39. The Minister for Energy, Connectivity and the Islands (the Minister) said the definition should be able to “*capture both existing and emerging technology*”.¹⁴
40. In follow-up correspondence, he stated—
- ” *...we can commit that any modification of definitions which would happen by regulation under section 1(7) will be subject to public consultation.*¹⁵
41. The letter also set out a list of existing heat network systems and those under development, describing the definition as based on distribution and “*agnostic*” on issues of ownership or generation of thermal energy.¹⁶

Licensing authority/Regulatory regime

42. Section 4 defines “*licensing authority*” as Scottish Ministers or such other persons designated by Ministers as the licensing authority by regulation.
43. The [Policy Memorandum](#) states—
- ” *The CMA’s Market Study suggested that Ofgem would be an appropriate body to act as the sector regulator. However, as Ofgem is a statutory body established by UK-wide legislation, it is the Scottish Government’s view that appointing it as a sector regulator in Scotland on a statutory basis would be beyond the competence of the Scottish Parliament.*
44. Furthermore—
- ” *The Scottish Government remains open to Ofgem taking on this function in Scotland, if UK Government legislative change allows, and if that is appropriate following the passage of the Bill.*
45. In terms of appeals, the Bill provides for regulation making powers under—
- Section 25 – regulation making power is provided in relation to compensation on modification or revocation of a heat network consent. Those regulation-making powers refer to compensation payment only, and under subsection (2)(c) that regulations can make provisions covering appeals against decisions made under those regulations – i.e. for compensation payment.
 - Section 32 – provides regulation-making powers in relation to appeals against an enforcement notice issued by the enforcement authority (as specified in section 28).
46. It does not, as drafted, provide for regulation-making powers in relation to appeals against the decision on revocation of a heat networks licence (section 11) or revocation of a heat network consent (section 24).

Evidence

47. What the Committee saw and heard broadly supported the creation of a licensing authority.
48. Ofgem stated—
- ” *It will be important to ensure broad consistency in approach between both the Scotland and England & Wales regimes.* ¹⁷
49. The CMA suggested there should be a UK-wide regulator and that Ofgem was “*well placed*” to take on the role, subject to dialogue between UK and Scottish Government. ¹⁸
50. Nicola Mahmood of ENGIE told us—
- ” *We might consider Ofgem to be the Rolls-Royce of regulation in an emerging market.* ¹⁹
51. SGN believed it was “*critical*” and in the interests of transparency for an independent body to oversee the licensing process. ²⁰ Developers were concerned there was no right of appeal, and that investments could be made in schemes not receiving consent.
52. Citizen’s Advice Scotland (CAS) felt that the proposed licencing system offered “*some protection*” for consumers via the fit-and-proper test for developers and operators. It was, however, concerned at “*potential tension*” between what was being proposed for Scotland and what had been envisaged for the rest of the UK. Further work was needed to understand the impact on consumers and developers of “*this divergent approach*”. ²¹
53. CAS’s Aoife Deery expressed concern about timing, with the Bill likely to be in place before the UK market framework, and a scenario whereby consumer protection “*will not have caught up*”. ²²
54. Ofgem said that licensing had been shown to be an “*effective form*” of regulating utilities such as gas, electricity and water. It drew a distinction between the regime in the Bill and the “*currently envisaged authorisation*” one being developed by BEIS, the latter requiring networks to meet “*specific entry requirements*”. Despite any differences—
- ” *We consider it to be essential for the regulator to have powers to monitor regulated entities’ activities, including taking compliance and enforcement actions to require performance improvements to be made.* ²³
55. Criteria or “*capabilities*” that ought to be applied to licensing, according to Ofgem, included—
- Ability to demonstrate adequate funding for the first year of operations;
 - Outlining how the company plans to provide a “*proper level*” of service to customers;

- Showing how it intends to comply with “*key regulatory and market obligations*”; and
 - Directors, major shareholders and senior managers passing a “*fit and proper test*”.²⁴
56. The regulator wanted “*clarity*” at the start of the process but with “*ongoing flexibility*” for the licensing authority to “*modify*” conditions depending on market developments.²⁵
57. Citing certain “*similarities*” with gas and electricity, and in the interests of regulatory oversight, it said—
- ” *Protections in relation to price, service and redress are the essential elements of any consumer protection package and should be made available to heat network customers too.* ²⁶

Scottish Government

58. The Minister sought a “*Great-Britain-wide framework*” and described “*good dialogue*” with the UK Government on the “*potential*” for the Scottish Government to appoint the same licensing authority i.e. Ofgem. His understanding was that such a solution was the one favoured by BEIS—
- ” *We are aware of the risk that two organisations – Ofgem and the licensing authority that the Scottish bill would create – could operate under two separate pieces of legislation, so we want to avoid any confusion that that might cause for consumers and the industry.* ²⁷
59. He thought it “*sensible*”, however, that the Bill had the “*flexibility*” of a “*fall-back position*” thereby ensuring legislative competence.²⁸
60. Asked about how the Scottish approach differs with the expected UK one, the Minister suggested what was outlined in the Bill was “*more in line*” with the CMA’s recommendation. He saw the UK’s expected approach to authorisation as “*valid*” but suggested the Bill offered “*more investor certainty*” via a “*robust and proportionate system*”—
- ” *We have learned a lot from how our colleagues in Norway and Denmark have developed heat networks, and our approach is more consistent with what has been done elsewhere in Europe.* ²⁹
61. James Hemphill, a Scottish Government official, said the licensing approach would allow solvency checks and promote dialogue with the sector; the “*advantage of a more proactive licensing system*”.³⁰ He also stated that were UK-wide legislation not forthcoming, the Scottish Government would continue to work with the Heat Trust on such matters as “*transparency, quality of service and responses to outages*”.³¹

62. Regarding the body “*over and above*” the licensing authority, currently the Scottish ministers (as the Bill is drafted), the Minister sought the Committee’s views—
- ” *We would like to be in a position where Ofgem, or another body as recommended by Parliament, would be the licensing authority and could therefore appeal to Scottish ministers in that scenario.* ³²
63. There was a lengthy discussion of the appeals process, concerns over which the Minister’s follow-up letter sought to address—
- ” *An appeals process which is to consider the merits of a decision (rather than its legality) envisages that there is a tier of authority under which decisions are initially made by one body but could be challenged on appeal to another. The Bill provides that decisions on the grant or revocation of licences or consents will be made by the Scottish Ministers and so it is not considered that there is another appropriate body to whom an appeal could be made on the substantive merits of the issues. That is why the appeals process is not provided for in the Bill. However, the Scottish Government recognises that, where the licensing authority is designated under section 4, and enforcement authority is designated under section 28, there may be a scope to introduce an appeals process.* ³³
64. He recognised that it was “*reasonable*” for a licence holder or holder of a consent to be able to “*make representation[s]*” before a licence or consent was revoked by Scottish Ministers. Although “*not an ‘appeal’*”, section 11(4) and (5) would “*ensure*” they have such an opportunity. ³⁴
65. Revocation of a network consent is possible under section 2 – a similar process as under section 11(4) and (5) – and regulations may specify how this is done—
- ” *However, we do recognise that there is a discrepancy in the processes and we are open to working with the Committee on this matter.* ³⁵

Licence conditions

66. Sections 6–9 make general provisions for the conditions and duration of a licence. Section 6(1) allows for the licensing authority to “*determine conditions relating to the obligations of persons holding heat networks licences*”.

Evidence

67. Oral and written evidence was broadly supportive of the proposed licensing regime, seeing it as providing a set level of economic and technical standards, so de-risking investment, as well as consumer protection.
68. The CMA noted that “*standard licensing conditions will be decided by the licensing authority*”; however, without sight of the specifics, it found it “*difficult*” to see how this might impact on consumer protection. It did though expect licensing conditions to cover—

- Regulation of prices (where “*whole life cost for customers of a new heat network exceeds that of alternative fuels, the additional cost should be met by the developer of the heat network*”);
 - Regulation of service quality (“*similar protections to gas and electricity customers, particularly in relation to the quality of service and protections for vulnerable customers*”);
 - Transparency (“*to allow people to make appropriate decisions when considering whether to live in a property with a heat network and information for heat network customers to understand and act upon their bills*”); and
 - Minimum technical standards (to “*comply with a new set of minimum technical standards, focusing on measurable performance outcomes*”).³⁶
69. Ofgem’s expectation was that standard conditions include “*various aspects of consumer protection*”—
- Protections covering price, service and redress;
 - Minimum standards for debt, disconnection and complaints handling, the latter to include an “*alternative dispute resolution scheme*”; and
 - Taking into account the “*unique characteristics*” of heat networks – e.g. that switching by consumers is unlikely, in the short term at least.³⁷
70. The regulator said it was “*very willing*” to engage with UK and Scottish Governments in order to “*ensure consistent consumer outcomes*”.³⁸
71. Scottish Renewables (SR) supported the proposed licensing regime³⁹ while Vattenfall had some specific concerns relating to coverage of existing heat networks, where technical standards will fit in the licensing regime, and the duration of a licence.⁴⁰
72. While it might not be possible for “*certain technical and decarbonisation standards*” to be applied to existing networks immediately, Ofgem felt consumer requirements should apply e.g. appropriate handling of complaints and a customer’s recourse to redress.⁴¹
73. Asked to differentiate between licensing and regulation, the Association for Decentralised Energy (ADE) saw no difference in practical terms, a view echoed by the Scottish Futures Trust.⁴²
74. The Law Society of Scotland (LSS) suggested a “degree of flexibility”—
- ☞ *To me, the regulator is the person who issues licences, determines who can get one, and then monitors the conditions of those licences, so, to my mind, it is just a difference in language rather than a difference in function per se.*⁴³

Scottish Government

75. Work was ongoing with BEIS to develop UK-wide technical standards, but the Minister was keen to avoid the Bill being “*overly prescriptive*” and wished to maintain “*scope for innovation*”.⁴⁴
76. He said there had been discussions with Ofgem “*in principle*” and it would “*create simplicity*” if the regulator became the licensing authority for both Scotland and England—
- ” *Having common technical standards being applied across both jurisdictions would create a propitious market opportunity for the development of the supply chain, too.*⁴⁵
77. On the question of existing networks, the Minister said the Scottish Government would work with them to consider the impact and “*identify appropriate solutions*”, whether that was about exemptions or a “*special set of technical standards*”.⁴⁶
78. He acknowledged that this was a “*technical bill*” with “*substantial*” delegated powers and said more detail would be provided via affirmative instruments to enable “*appropriate consultation*” with the Parliament and interested parties.⁴⁷
79. The Scottish Government was “*following closely*” the CMA’s approach to regulatory needs and suggested it was the smaller networks where “*consumer detriment*” had been found, “*particularly*” those privately owned.⁴⁸ Also—
- ” *We have noted the suggestion from committee members that the requirement to hold a licence should not apply to networks that serve only the owner’s buildings or premises. We agree that that would be sensible.*⁴⁹


Conclusions

80. **The Committee considers the definitions – of heat network, district heat network and communal heating system – to be sufficiently clear, but with a degree of flexibility to respond to future developments; and, if necessary, able to be modified by regulation.**
81. **We welcome the Scottish Government’s commitment to publicly consult on any future modification of those definitions.**
82. **The Committee agrees with the view that, in an emerging UK-wide market, Ofgem would be ideally suited to take on the role of regulation. We note it is likely the UK Government will look to legislate on that basis. We did hear some concern about the impact on consumer protection, were there to be any divergence between the Scottish and Westminster approaches, and the regulator told us it was keen to work with both governments to ensure consistent consumer outcomes. We ask that the Scottish Government keep us updated on the progress of ongoing discussions with the UK Government and with Ofgem.**

83. **Given discussion with witnesses on the topic (see paragraphs 73 and 74), we invite the Scottish Government to clarify the future development of the licensing and regulatory regime.**
84. **We note the rationale for the appeals process not being provided in the Bill. However, the Scottish Government has recognised that – where the licensing authority is designated under section 4, and the enforcement authority is designated under section 28 – there may be scope to introduce an appeals process. The Committee asks the Scottish Government to further reflect on this; whether this is something that can be addressed at Stage 2; and, if not, what further assurances it can provide as to the opportunity and transparency of a right to appeal, be that an appeal in the technical sense or something else.**
85. **This is a technical bill and one with substantial delegated powers. We welcome the Minister’s commitment that more detail and appropriate consultation with the Parliament and public will be forthcoming as those instruments are prepared.**
86. **The Committee also welcomes his commitment to work with existing networks to identify appropriate solutions, whether that involves exemptions or modified technical standards. We note the Minister’s view that it would be sensible not to apply the requirement to hold a licence to those networks serving only the owner’s premises. We ask for further detail on that particular point.**

Parts 2 and 7 – Consents and key assets

87. Part 2 establishes the heat network consent process for specific projects. Heat network operators will be required to apply for consent to develop new heat networks or to expand existing ones.
88. It interconnects with Part 7 which requires Ministers to identify key assets (e.g. property or apparatus) of each heat network consent application received. This will allow a schedule of assets to be drawn up for a transfer scheme should an operator cease to operate a particular heat network.
89. Section 19 allows for applications to be made to Scottish Ministers for consent, and for that "*heat network consent application*" to be made in relation to the construction or operation of a heat network, or both. The Explanatory Notes state—

 *It is envisaged that not all persons responsible for the construction of a heat network will go on to operate the network and conversely, not all heat network operators will be involved in heat network construction.*
90. Section 35 amends section 57 of the [Town and Country Planning \(Scotland\) Act 1997](#) to add new sections (2C) and (2D). The [Explanatory Notes](#) state—

” Section (2C) provides that on granting or modifying a heat network consent under section 20(1)(a) or 23(1) of the Heat Networks (Scotland) Act 2021 (the “2021 Act”), the Scottish Ministers may give a direction for planning permission to be deemed to have been granted, subject to conditions (if any) to be specified in the direction. Planning permission will be granted under subsection (2C) for so much of the operation or change of use to which the consent relates as constitutes development and for any development ancillary to the operation or change of use.

91. Section 2(D) provides that, on "modifying a heat network consent under section 23(1) of the Heat Networks (Scotland) Act 2021", Ministers may—
- Vary an existing planning permission deemed to be granted under subsection (2C) and / or
 - Vary conditions attached to an existing planning permission deemed to be granted.
92. This approach is similar to that taken in the existing energy consents process, where the planning permission can be deemed to be granted by Ministers as part of one application process.
93. Sections 69 – 76 (Part 7) relate to the identification of key assets (e.g. property or apparatus) of each heat network and allow for a schedule of assets to be drawn up in the event of transfer. The [Policy Memorandum](#) states—
- ” *In order to comply with competition law, and in the interests of fairness, Heat Network Zone Permits will not last in perpetuity and there will be an opportunity for others to apply to operate the network in future, once the capital costs of the infrastructure have been recovered.*
- To ensure that this is done on a competitive basis, it may be necessary to invoke a transfer scheme in order that the incoming operator has rights to use the heat network assets. This is to ensure that an incumbent operator is not in an unfairly advantageous position.*
94. Where an operator ceases (or is required to cease) operating a network, Sections 74 and 75 allow for Transfer Schemes, and connected compensation – allowing for the detail of these schemes to be set out in secondary legislation.

Evidence

95. It was noted in evidence that fuel poverty is included as a proposed assessment criterion for consents in the Policy Memorandum. However, while decarbonisation is mentioned, fuel poverty does not appear on the face of the Bill.
96. SR noted that the inclusion of fuel poverty for consents but pointed out the early stages of development tend to focus on non-domestic buildings.⁵⁰
97. In the view of Ofgem—

” *It will be important to be clear about how far it will be possible for the Scottish licence conditions or network consents to regulate price, which is key for the reduction of fuel poverty.* ⁵¹

98. Aberdeen Heat and Power (AHP) told us—

” *In order to lock in future Administrations, we think that it would be helpful if a reference to fuel poverty appeared in the bill.* ⁵²

99. Further concerns were raised about there being no formal role for communities or local authorities in the planning and consent of schemes. ⁵³

100. Aoife Deery of CAS wanted community input not merely through online consultation but “*genuine involvement*” in the process. She gave an example of a heat network set up in north-west Glasgow in 2012 and where 90 plus customers ended up disconnected because of arrears brought on by a price hike. These were “*vulnerable households*” left with no heating or hot water. The provider then demanded £270 and a portion of the debt to be paid off before reconnection, “*for many*” an impossibility—

” *Had better community engagement happened beforehand, the providers would have better understood the needs, incomes and characteristics of the consumers and the situation could have been resolved more quickly or avoided.* ⁵⁴

101. CAS stated in its written submission—

” *While the intentions of the Bill are admirable, we are concerned that the Bill does not have sufficient devolved competency to deliver on these, or where it does have competency, it could go further to guarantee good outcomes for consumers.* ⁵⁵

102. Its detailed comments included—

- Many heat networks are currently run using natural gas, a carbon-emitting fossil fuel;
- The Bill may not go far enough in encouraging developers / operators to move away from gas in favour of renewable sources;
- Heat networks have the potential to help reduce fuel poverty through providing heat at a lower cost to consumers – however, this Bill cannot guarantee lower fuel costs for heat network consumers as it does not have competency over pricing;
- The Bill cannot oblige heat networks to publish their tariffs so that consumers can compare what they are paying in the same way gas and electricity consumers can;
- While heat networks are in many cases able to provide lower cost heating, this Bill will not compel them to do so and consumers will not be guaranteed that their fuel costs will be reduced;

- The Bill is very limited in terms of consumer protection, as this is reserved;
 - A request for consumer protection for heat networks to be devolved has been made; and
 - Consumer protections within the market framework will apply UK-wide, but it is currently unclear if this can sit in the proposed Scottish licence or not and what the implications will be for enforcing consumer protections in Scotland.⁵⁶
103. In the absence of overt consumer protection in the Bill, CAS identified “*scope*” in the Bill’s licensing, consenting and zoning sections to “*incorporate community engagement*” and enable consumers to be “*better involved*”.⁵⁷
104. Written and oral evidence has suggested that the business case for existing heat networks might be up to 40 years, with at least 15 years before key infrastructure is paid off. There may also be problems where some existing heat network operators do not successfully obtain a licence and will no longer be able to operate that network, with potentially “*detrimental consequences*” for existing customers.⁵⁸
105. The Law Society of Scotland (LSS) wondered how such risk could be mitigated—
- ” *It is not addressed by the transfer scheme proposals as these networks may not have “listed assets” as defined under section 76 of the Bill as those “listed assets” are determined through the heat network consent process.*⁵⁹
106. Ofgem agreed the Bill should include “*suitable backstop arrangements*” for continuity of supply should the operator of a heat network become insolvent or there is a “*failure in supply*”.⁶⁰
107. Given the inability of the consumer to switch provider, at least in the immediate term, the regulator stressed the importance of “*clear, transparent price and billing information*” and “*appropriate mechanisms*” to protect them protect against “*excessive pricing*”—
- ” *While we support this intention, we think more detail is needed from BEIS on the price protection aspects of their proposals.*⁶¹
108. Furthermore—
- ” *It is important that customers of heat networks know their rights – particularly since these will differ from electricity and gas customers.*⁶²
109. It said there was a “*risk*” this may not be something fully addressed by estate agents and landlords and a “*possible solution*” may be placing obligations on the “*regulated entity*”. The Heat Trust was said to provide a Heat Customer Information Pack and BEIS has suggested a “*minimum level of pre-contractual information*”.⁶³

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110. The Minister said he would “*look seriously*” at calls for a “*more explicit focus*” on fuel poverty⁶⁴, suggesting that by 2050 heat networks could save “*up to 36 per cent on consumer bills*”. He wanted to encourage “*visibility*” about such benefits – along with not having to maintain a domestic boiler, removing the risks of fire and carbon monoxide, and the fact that most heat networks have a back-up system—

” *There are multiple benefits, but primarily it is about tackling fuel poverty.*⁶⁵

111. It had been an “*absolute priority*” in the development of the Bill but in order to ensure that was clear “*beyond all doubt*”—

” *...I will be happy to work with the committee, as well as with individual members of the committee...and also with the fuel poverty partnership forum, to put those reassurances in the bill.*⁶⁶

112. Addressing consumer protection, Mr Wheelhouse said he was working with the UK Government to secure powers to put in place “*comprehensive*” standards in Scotland⁶⁷ and—

” *We will have to see how the UK Government’s legislation on consumer protection lands in terms of the requirements for reporting on the pricing of the networks, for example.*⁶⁸

113. He wanted a “*robust system*” to protect and imbue consumers with confidence, learning from the experience of heat networks in countries like Norway and Denmark. People needed to be confident about their heat supply should a developer face financial trouble. “*Step-in rights*” were being pursued by the UK Government⁶⁹ and the Bill took a “*subtly different approach*”⁷⁰ but Part 7 – sections 70 and 74 and specifically section 74(6) – “*essentially*” gave Scottish ministers “*powers equivalent*” to those rights.⁷¹

114. The Bill requires “*all heat networks companies*” to hold a licence but in section 3 there are regulation-making powers for “*exemptions*”. The Minister said the CMA report was “*clear*” the current market needed regulation and—

” *It is envisaged that heat network licences will be a means by which consumer protection will be provided for once an agreement is reached with the UK Government on this matter.*⁷²

115. Accounting for the “*impact*” of regulation on existing companies and networks, the Minister said section 6(5) allowed standard conditions to be excluded or modified, or for exemptions to be “*time limited*”, so that the “*regulatory burden*” did not impose “*difficult circumstances*”⁷³

116. His letter stated—

” *For clarity, heat networks which are already operational will not require to apply for a heat network consent or permit.*⁷⁴

117. Mr Wheelhouse wanted to “*strike the right balance*” so that local authorities had the necessary powers to lead in developing heat networks.⁷⁵ Engagement was ongoing over Local Heat and Energy Efficiency Strategies (LHEES), consenting powers and zoning.⁷⁶
118. He observed that a “*significant minority*” of respondents to the Scottish Government’s second consultation suggested local authorities lacked the “*necessary resources*” to manage the consents process plus ONS data showed heat networks were not “*evenly distributed*” across the country. The Bill therefore looked to “*maximise economies of scale*” with a national consents process undertaken “*in practice*” by the Scottish Government, its Energy Consents Unit being well versed in a “*very similar process*” with electricity and renewable energy.⁷⁷
119. Mr Hemphill underlined work that was continuing with the heat networks working group, whose membership included representatives from three councils, and engagement with “*COSLA in particular*”.⁷⁸
120. The Minister sought to offer reassurance about the designation of heat network zones (section 40)—
- ” *That section is not intended to overrule local authorities...or to disregard local views in any way. However, we must remember that we are living through a global climate emergency, and we need to be confident that we are fully able to identify all potential heat network opportunities in order to address that.*⁷⁹
121. He said that if a council was not in a position to identify zones, or “*good opportunities*” were being missed, Scottish ministers would have recourse to that function. Further consultation would “*of course*” be carried out prior to any implementation of a zone.⁸⁰
122. Asked about the contrast between Denmark and Scotland in terms of levels of decentralisation of powers, the Minister said the aim was not to take a “*radically different approach*” and, informed by the working group, they had “*struck a balance*”—
- ” *We are trying to create a consistent approach across Scotland. It is possible that heat networks will cross local authority boundaries; there are a number of different permutations in urban settlements and suburban areas in particular...but if the committee feels that the balance is wrong, we would be keen to hear about that.*⁸¹
123. Norway was another example cited, one which had begun with a more “*centrally-led*” approach but “*gradually*” devolved responsibility to local authorities. James Hemphill said—
- ” *The bill allows for regulations to change the enforcement authority from the Scottish ministers to another person, so the door is not closed to that option in the long term.*⁸²
124. In terms of the ownership model, the Minister said he was “*certainly*” not taking the approach of “*purely*” pursuing large investors. They were examining ways to

“*encourage diversity*” and noted there will “*potentially*” be more small networks in Scotland. He was “*keen*” this was reflected in the UK framework for consumer protection—

” *We would want to ensure that the regulations and frameworks are proportionate and do not apply the same rules to a large corporate and to a smaller locally led project that is struggling to be viable.* ⁸³

125. Regarding the regulation of what would effectively be localised or natural monopolies, Mr Wheelhouse said the monopoly would last for the duration of the infrastructure investment being paid back. After that, other operators could enter the picture with a “*potentially more attractive proposition*”. He suggested “*most*” heat networks had been “*at least competitive*” with gas, and new ones should also be if “*well designed*” and situated via LHEES and heat zoning—

” *We would welcome the committee’s views on that aspect and on the approach that we are taking to avoid higher costs for consumers.* ⁸⁴

126. On the subject of engaging consumers, it would be important to “*build the case*” for the public in an “*explicit, transparent and understandable way*”—

” *A key part of providing that clarity will be information about the costs of the network – whole-life costs and the costs that consumers will have to pay.* ⁸⁵

127. An “*evidence review*” of attitudes to low carbon heating was due to be published, the findings of which will inform a forthcoming Heat Decarbonisation Policy Statement. Another report had considered lessons from Europe and found “*multiple regulatory measures*” for engaging communities whether in the form of “*public hearing[s]*” with network operators or “*mandating*” measure to ensure transparency of pricing. The “*need for a step change*” in engaging the public on climate change and related issues was acknowledged, and the Minister referenced a BEIS survey from September 2020—

” *Transforming Heat – Public Attitudes Research...found that there was strong public support for carbon reduction policies, but there was some disconnect with knowledge of heating’s role in climate change.* ⁸⁶

128. He pointed out that “*over half*” of energy consumption in Scotland was heat, with 81 per cent of dwellings dependent on gas, and said if we were “*serious*” about the climate emergency, greater progress was needed—

” *This will be a big transformation in the way in which we undertake our heating. It will not apply to every premises...However, where it is happening, it will be done through a system that leads to networks developing where they are most appropriate to support communities.* ⁸⁷

129. In terms of encouraging developers and operators to move to renewable sources, the introduction of Heat Network Licences will “*enable requirements*” to use renewable sources. Section 5(4) places an “*obligation*” on the licensing authority to assess the ability of an applicant to “*decarbonise their thermal energy generation*”. There is also scrutiny via the consenting process (section 17) which enables energy use to be considered for each project in terms of how it may contribute to the goals

of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.

“Decarbonisation plans” are also a possibility for existing networks.⁸⁸

Conclusions

130. **Fuel poverty is included as a proposed assessment criterion for consents in the Policy Memorandum. Unlike decarbonisation, however, it does not then appear on the face of the Bill.**
131. **The Minister said tackling fuel poverty had been an absolute priority in the Bill’s formulation and would be a primary benefit of the legislation. He stated his willingness to work with the Committee, individual members, and the Scottish Fuel Poverty Partnership Forum to put those reassurances on the face of the Bill. The Committee therefore invites him to reflect on the evidence, discuss further with the Forum, and – in advance of the Stage 1 debate – bring forward a proposal for how best to address the policy imperative of fuel poverty within the wording of the legislation.**
132. **On the question of where in the Bill fuel poverty would best sit, suggestions included: alongside greenhouse gas emissions in sections 5(4) and 6(8), to give it parity as a key principle; or at section 39, to allow local authorities to use their powers to direct zones where they can best alleviate fuel poverty. The Committee invites the Minister to consider where inclusion would have maximum impact.**
133. **Concerns were raised about the absence of a formal role for communities or local authorities in the planning and consent of schemes. Citizens Advice Scotland gave an example of a heat network in north-west Glasgow where 90 or more vulnerable customers had been disconnected due to arrears following a price rise, the provider subsequently demanding a £270 reconnection fee plus a portion of the debt to be paid off upfront, something that would not be allowed to happen with the supply of gas or electricity. Had the needs of the community been better understood, it was suggested, the hardship could have been avoided. CAS felt there may be scope in the Bill’s licencing, consenting and zoning sections to incorporate community engagement and enable consumers to be better involved. We ask the Minister to reflect on this. The Committee believes this should not just be about online consultations or seeking views at the start of the process; it must be a matter of social licence, securing public confidence, and putting the concerns of communities like the one in Glasgow at the very heart of the Bill.**
134. **The Competition and Markets Authority’s recommendation was that the market required regulation. We note the Minister’s intention that licensing should be the way forward for consumer protection once an agreement is struck with the UK Government, including coverage of reporting on the pricing of networks. We note also his desire to have a robust regulatory system in place – informed by the experience of those countries with many years of experience of heat networks, notably Denmark and Norway – in order to imbue customers and investors with confidence.**

135. **People should not have to worry about the scenario of a heat supplier becoming insolvent and leaving them without a heat supply. We were told that in such circumstances the Bill would give Scottish ministers essentially equivalent powers to the step-in rights expected to be adopted by the UK Government. However, given where discussions are with the UK Government and with the Westminster legislation not as yet introduced, we invite the Scottish Government to consider the suggestion from Citizens Advice Scotland; and to set out – whether on the face of the Bill or otherwise – how best to protect and promote the interests of communities and consumers.**
136. **Comparing the degree of decentralisation of powers within the Bill, the Minister said the aim here was not radically different from the Danish approach; and – informed by the heat networks working group – that a balance had been struck. There were local authorities that perhaps lacked the resources to manage the consents process; data from the ONS had shown heat networks were not evenly distributed across Scotland; and the Bill was seeking to maximise economies of scale. In Norway, we were told, a more centrally-led approach had evolved to provide more responsibility to municipalities. The Committee notes the balance between the national and the local as arrived at in the Bill. We note, however, the evidence from the Danish Energy Agency that the municipalities govern the consents process and, together with consumer co-operatives, own the pipe network. We believe that it is desirable for the balance of powers between Ministers and local government to be modified over time and that the Bill should make provision for this.**
137. **The Minister invited our views on the regulation of what will effectively be localised or natural monopolies, lasting for the duration of the infrastructure investment being paid back. We would simply underline earlier points about fuel poverty and consumer protection and ask the Scottish Government to keep us updated on its ongoing discussions with the UK Government and Ofgem over a UK-wide regulatory regime.**
138. **With heat making up more than half of energy consumption in Scotland and 81 per cent of dwellings being dependent on gas, the Minister said a big transformation – as intended with this Bill – was essential if we were serious about climate change. In terms of encouraging developers and operators to move to renewable sources, we heard that the introduction of Heat Network Licences and their conditions, an obligation on the licensing authority to assess the ability of an applicant to decarbonise, and scrutiny via the consenting process could all contribute to the goals of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. Decarbonisation plans were also a possibility for existing networks.**
139. **We also note that in February 2020 the Scottish Government wrote to the UK Committee on Climate Change to ask for advice on the 2030 target to reduce emissions by 75%. The Minister referred in his evidence to estimates of between 7 and 17 per cent of Scotland’s heat demand coming from heat networks but he was hopeful we might manage to overachieve on those figures.⁸⁹ We therefore invite the Scottish Government to reflect on whether its ambitions for the impact of the Bill are on a level with those it has already set out for tackling climate change and pursuing a green recovery. We also**

ask what the anticipated timeframe is for implementation in respect of new heat networks coming into operation under the framework of this legislation.

140. **The Committee will return to the wider policy picture when we consider the Scottish Government’s updated climate change plan and its annual energy statement in due course. With the postponed COP26 due to take place in Glasgow in 2021, it might be apt – timeframe permitting – to have a detailed policy case study to present, perhaps in the form of this Bill alongside relevant targets and initiatives and with local examples to highlight.**
141. **Public engagement, as we found during our recent energy inquiry, is essential to the success of any policy. The key question is how to balance the often competing issues of the energy quadrilemma: addressing climate change; ensuring affordability; providing energy security; and developing energy policy which is acceptable to the public, economically sustainable and just. The Committee on Climate Change has advised the Scottish Government to take the lead in a shift towards positive long-term behaviours and embedding new social norms.**
142. **In the context of this Bill, the Minister has acknowledged the need for a step change when it comes to engaging the public. He referenced a recent Department for Business, Energy & Industrial Strategy survey, *Transforming Heat – Public Attitudes Research*, which found strong public support for carbon reduction policies, but some disconnect with knowledge of the role of heating in climate change.**
143. **We heard an evidence review of attitudes to low carbon heating was due to be published, the findings of which will inform a forthcoming Heat Decarbonisation Policy Statement. Another report has considered lessons from Europe and found various ways of engaging communities whether in the form of public hearings with network operators or mandatory measure to ensure transparency of pricing. The Committee asks the Scottish Government to keep us updated on these various fronts, and – given the range of initiatives – to set out—**
- **How such inputs are informing its approach to the Bill and related policy;**
 - **Whether they are likely to change the policy emphasis in a meaningful way e.g. leading to amendments at Stage 2;**
 - **In particular, how to address that disconnect between public support for climate reduction measures and lack of awareness of the role of heat; and**
 - **What steps are being taken to ensure policy coherence e.g. read across with concepts like the Scottish Heat System and Heat Hierarchy and the push for low carbon and renewable heat to be the default energy source.**

Parts 3 and 4 – Zones and permits

144. Part 3 places a duty on local authorities to consider undertaking the designation of heat network zones. Local authorities are not required to undertake this process, only to consider it, and may direct Ministers to designate heat network zones on their behalf.
145. Part 4 builds on the designation of heat network zones by allowing Ministers to award a Heat Network Zone Permit via competition to a single, winning bidder, thereby providing exclusivity for a specified number of years.
146. Section 37 allows a local authority to “*designate an area in its area that is particularly suitable*” for a heat network.
147. Under Section 38 each local authority must “*carry out a review to consider whether one or more areas...has the potential to be designated as a heat network zone*”. This must be done “*as soon as practicable*” after this section comes into force and at least every five years thereafter.
148. Section 39 sets out the basic process and requirements for a local authority to designate a heat network zone. In considering whether to do this, it must have regard to the potential for use of—
 - Thermal energy from renewable sources
 - Waste heat or cold
 - Buildings in the area that require considerable and consistent use of thermal energy (known as anchor buildings)
 - The nature and extent of existing infrastructure in the area that could assist
 - Any building assessment report received under section 54
 - Any other matters specified by Ministers in regulation
149. Section 40 is similar to Section 39 and allows Scottish Ministers to designate a heat network zone, whether from a local authority request or their own initiative.

Local authority duties – evidence

150. Evidence has called for the Bill to be strengthened by introducing an obligation to connect new buildings, public sector buildings and non-domestic buildings within Heat Network Zones; as well as heat network zoning being made a statutory duty for local authorities alongside the statutory development of LHEES. The “*biggest prize*” in relation to decarbonising heat is considered to be existing properties, especially in urban areas.
151. In relation to local authority duties, Vattenfall told us—
 - ” *If we look at the developments down south, we can see that the Department for Business, Energy and Industrial Strategy and heat network policies have resulted in a lot of studies but very little action.* ⁹¹

152. They sought “*more material obligations*” for local authorities to make progress with heat network zones.⁹²
153. Scottish Renewables (SR) similarly wanted to see more impetus coming from the local level—
- ” *The bill could be strengthened to require local authorities to state clearly whether they intend to issue zone permits. If they do not, they should explain why and publish, alongside the zone assessment plan, their plan for commercialising the opportunities and taking things forward.*⁹³
154. Glasgow and Highland councils had taken part in Local Heat and Energy Efficiency Strategy Pilot Projects. Glasgow warned—
- ” *Care must be taken not to overload local authorities in the process of reviewing and assigning zones.*⁹⁴
155. Highland considered the approach to zones the “*most positive enabling measure*” possible and would enable the provider to enter a “*strategically/technically assessed area*”. It saw permits and concessions as a “*clear mandate*” to pursue “*viable opportunities*”.⁹⁵
156. Many witnesses stressed the need for community involvement in individual projects, and public buy-in more generally. They noted increasing public interest in decarbonisation and climate change yet highlighted that a lot of people did not appreciate gas boilers were emitting technologies.

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157. The Minister said there was a “*big economic prize*” of local job opportunities if heat networks were to be developed, and he described the local authorities he had spoken to as “*keen*”—
- ” *There are a number of reasons to believe that local partners will be very enthusiastic about heat networks.*⁹⁶
158. The Scottish Government was committed to “*resource some of the costs*” to develop LHEES and heat zones for those local authorities who might need the support.⁹⁷ Asked in what circumstances they would designate a heat network zone, the Minister hoped it would “*not be a regular occurrence*”—
- ” *If we had to step in in that way, under section 40, we would not ignore the local authority in performing that function; indeed, we would also consult other relevant local persons, such as the local community, prior to the implementation of the zone.*⁹⁸
159. Speaking about the piloting of LHEES across all 32 local authorities and the learning that had come from that, he was “*hopeful*” that the “*final nine*” will report in “*early 2021*”. His “*proposal*” was that LHEES be underpinned by a statutory duty via

secondary legislation in the interests of consistency and providing an “*important piece of evidence*” to strengthen the business case—

” *Our aim is to try to achieve what has been done in Denmark and Norway, where LHEES are seen as low-risk investments in those markets. Therefore, they can attract finance at a low cost of debt and allow the sector to grow.* ⁹⁹

Obligation to connect – evidence

160. Association for Decentralised Energy (ADE) thought zone permits would promote competition and “*good consumer outcomes*” but it looked to “strengthen” the Bill—

” *...we would like to see Scottish Government go further, to introduce an obligation to connect for new buildings, public sector buildings & non-domestic buildings within Heat Network Zones.* ¹⁰⁰

161. It was a view supported by Vattenfall. The company differentiated between new builds and existing stock, suggesting that the former could be covered via the planning process with a “*de facto assumption*” new builds would be connected. However, with existing buildings—

” *One reason why we want to see that obligation to connect is that it allows for a bigger view to be taken of the whole heat network, which enables people to invest ahead of need, in different areas at different times.* ¹⁰¹

162. The Energy Saving Trust (EST) suggested “*additional consideration*” should be given to how we encourage “*anchor loads*” and other large users to connect—

” *In Denmark, for example, there is a standing charge applied to buildings which could connect but don’t, with exemptions in place for low-energy buildings or those already heated from renewable sources.* ¹⁰²

163. It said that Denmark had applied a limited “*grace-period*” after which a review determined the necessity of further intervention. ¹⁰³

164. The Law Society of Scotland (LSS) stated—

” *It seems to be assumed that schemes can be viable without compulsion. If experience were to show that the assumption was incorrect, pressure for compulsion might follow...probably, causing unacceptable intrusion into privacy and consequently, unenforceable.* ¹⁰⁴

165. Some evidence highlighted the possibility of there being a legal impediment to introducing a compulsion to connect; the Policy Memorandum stating—

” *A stronger clause mandating use or limiting the source of heating only to a heat network is not proposed at this stage...Such an approach would likely require the regulation of pricing where connection had been secured on a ‘mandatory’ or ‘obligatory’ basis, to safeguard consumers, but the Scottish Government believes that the Parliament may not have devolved competence to provide for this in the Bill.*

166. Homes for Scotland took the view that compulsory connection could result in limiting consumer choice and putting the industry at a competitive disadvantage. ¹⁰⁵
167. Ken Brady from EST told us there was a “*legal impediment*” to making connection mandatory for anchor loads but that the approach taken suggested a “*gap and a mismatch*”—
- ” *...because you can identify, in theory, where the zones should be, but without the big anchor loads, you will not get investors and you will not get a viable heat network.* ¹⁰⁶
168. On further discussion of the nature of that legal impediment, he said the matter had been raised in the working group but was “*privileged legal advice*” for ministers—
- ” *One way around that is the Danish system, in which there is a standing charge on anchor loads, regardless of whether they connect to the network. That incentivises the anchor loads and the big operators to connect.* ¹⁰⁷

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169. The Minister said there had been “*some debate*” on the working group and the more recently established heat networks group about how far you could go to “*mandate*” network connections. Such discussions took place within a “*fairly complex legal landscape*” including reserved powers and also the European Convention on Human Rights. ¹⁰⁸
170. While stating he could not disclose legal advice, the Minister did outline the issues—
- “*With mandatory connection, the reduction of demand risk is likely to involve more than just the power of a heat network operator to carry out works...It is more fundamentally a requirement on the owner or occupier of the building to use and, indeed, pay for the heat from that network.*”
 - “*The power to carry out works to alter another person’s property without their permission and, indeed, in the face of objection, which is a situation that might arise, clearly involves an interference with that person’s property rights. Therefore, it has the potential to engage the provisions of the European convention on human rights.*”
 - “*The engagement of ECHR provisions is not, of itself, a bar to mandatory connection. It is possible to both interfere with property rights and comply with the ECHR, provided that it can be shown that interference is fair, proportionate and justifiable when balancing the impact on the individual against the public interest.*”
 - “*When it comes to individual consumers there are the ECHR aspects as well as the issue of reserved powers. The most likely landing point is that there will be a GB-wide consumer protection framework, under which we will have a role in appointing a licensing authority to oversee in Scotland and to take on that*

responsibility. There will be some interactions with reserved legislation as well, which makes it difficult in terms of the points around standing charges...

- *“We have tried to put as much in the bill as we can to enable the efficient delivery of the infrastructure, in order to keep the capital costs to a minimum. We have also tried to allow for the possibility that, even if the original occupier of the building that is being connected is not interested in being part of the heat network, it will be as low cost as possible for the next occupier or owner of the building to say, “Yes, please, I would like to be connected to the network”.”*¹⁰⁹

171. They were also looking at working with the public sector through building assessment reports to *“inform the decision”* on connecting a building to a heat network.¹¹⁰
172. James Hemphill said the working group could not produce a consensus on how to deal with *“demand risk”* but he cited some examples they had considered: the sole right to operate within a certain zone; planning policy *“more strongly”* encouraging new buildings to connect; and the public sector considering *“total life-cycle costs”* for heating its buildings. One of those *“asks”* had been *“delivered”* through part 4 of the Bill and heat network zone permits.¹¹¹ He also mentioned the *“opportunity”* afforded by wayleave rights (part 6), national planning framework 4, new powers under the Non-Domestic Rates (Scotland) Act 2020, all with potential *“in and out of the Bill”*.¹¹²
173. In terms of European examples, Urszula Kasperek said they had *“closely”* examined the compulsory standing charge applied in Denmark. However—
- ” *...it poses a lot of different complex questions, such as whether that additional charge is fair when we already talk a lot about fuel poverty here ...*¹¹³
174. They had also studied some of the German municipalities (where a mandatory connection applied but there was no consumer protection) and Norway (where the planning system was used)—
- ” *Different options exist, but none of them was a perfect match for us and...all of them carry some risks.*¹¹⁴

Multiple parties – evidence

175. Scottish Water highlighted the Stirling Low Carbon Energy Project in which different entities are involved in *“wholesale and retail activities”*. Scottish Water Horizons is the wholesaler of heat to Stirling Council and the Council then retails that heat to end users connected to the heat network. Horizons owns and operates the energy centre producing the heat and Stirling Council owns and operates the network. This raised a number of questions in relation to which party would be responsible e.g. for licenses, consents and permits.
176. Ofgem proposed—

- ” *A special purpose vehicle could be established and licensed where schemes are developed as joint ventures or by a consortium.* ¹¹⁵

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177. James Hemphill said obligations would apply to “*any subcontractor*”, with the licence holder accountable for the actions of the subcontractor. ¹¹⁶
178. Describing the Stirling example as “*quite a common model*”, Urszula Kasperek explained that “*one major party*” would be licensed and responsible—
- ” *We do not want to hinder any business models, because they are evolving...it is an emerging market...However, we recognise that, if there are multiple parties, one of them has to be the responsible one.* ¹¹⁷
179. The Minister said that if any parties failed to deliver on those obligations – with “*the top tier*” of the project “*ultimately*” responsible for those underneath – then it would “*potentially*” call for action from the licensing authority—
- ” *If there was a failure to protect the interests of consumers, the potential ultimate sanction would be revocation of the licence...* ¹¹⁸
180. Mr Hemphill also observed that “*obligations*” could be attached to the consent and, if the consent holder for the site changed, transferred to the new holder. He said that should more schemes depart from the vertical model, and leave the consumer voice unheard, they could explore consumer advocacy powers devolved in 2016. ¹¹⁹

Conclusions

181. **The importance of the role of local authorities in the heat network process should not be underestimated. We heard concerns that there could end up being lots of studies but little action. Other witnesses warned against overloading councils with expectations and obligations. As to the circumstances in which the Scottish Government would act under Section 40 to designate a heat network zone, the Minister hoped that would not be a regular occurrence. He stressed the local authority would not be ignored and the community would be consulted prior to implementation. Community buy-in, consumer confidence and social licence will be integral to the success of heat networks projects, and accordingly we restate our view that public engagement must be a top priority.**
182. **We recognise that the development of Local Heat and Energy Efficiency Strategies will involve communities and local authorities, and that this will feed into the development of heat networks. Pilot strategies have been developed but as yet there are no formal proposals for these. The Committee therefore invites the Scottish Government to set out how it can address the**

absence of a formal role for communities or local authorities in the planning and consent for heat networks.

183. **The Minister was optimistic that local partners would be positive in their approach to heat networks. The Scottish Government was committed to its ongoing partnership work with the heat networks working group, which includes local authority representation, and with COSLA. It would also be contributing toward the cost for developing Local Heat and Energy Efficiency Strategies and intended to provide a statutory underpinning for LHEES through secondary legislation. We invite the Scottish Government to share the wording of the policy that will inform that regulation prior to Stage 2.**
184. **The Committee asks the Scottish Government to provide further details in respect of—**
- The budget for LHEES and how costs will be shared with local authorities;**
 - The stage of development and expected timing of that secondary legislation;**
 - An update on progress with the pilot scheme and its likely completion date;**
 - How it views the correlation between LHEES and heat networks; and**
 - Any issues it has identified which could arise from the time-lag between the Bill and LHEES.**
185. **A number of witnesses wanted the Bill strengthened with an obligation to connect. In Denmark there is a standing charge for buildings that can but do not connect and a grace period after which a review determines the need for further action. The Law Society of Scotland was concerned at the potential for intrusion and likely enforcement issues, if the policy was to lead in that direction. The Minister described a complex legal landscape, including reserved powers and potential to engage the European Convention on Human Rights.**
186. **The working group on heat networks had not come to a consensus on how to deal with what was termed demand risk. There was though the route of heat network zone permits (part 4 of the Bill) and the potential for other policy options whether in or outside of the Bill. The Committee acknowledges the difficult legal terrain needed to be navigated; however, we are keen – in view of the necessity of anchor loads for the viability of heat networks – to explore these options further. We therefore invite the Scottish Government to provide more detail, setting out exactly what it considers can be achieved either through the Bill or via other levers.**
187. **The question of multiple parties links to consumer protection. The Scottish Government was clear that the top tier in the process – i.e. the licence holder – is ultimately accountable. It was also said that should more schemes depart from the vertical model, and the consumer voice go unheard, then devolved consumer advocacy powers could be explored. We invite the Scottish Government to further outline its thinking in that area.**

Part 5 - Building assessment reports

188. Part 5 places a duty on public sector building owners to assess the viability of connecting their building to a heat network and to report to their local authority and Ministers to enable appropriate zoning and to encourage connection networks.

189. The [Policy Memorandum](#) states—

” *...there is a lack of data on the energy performance of non-domestic buildings and this risks resulting in Heat Network Zones which are not as robust as they otherwise might be. This may increase the risk that their designation is challenged.*

To ensure sufficient and reliable data is available, the Bill will place a duty, initially, on public sector building owners to undertake an assessment of the viability of their buildings to connect to a heat network...

Buildings with large-scale heat demand can act as an ‘anchor load’ for heat network developments by providing a substantial, long-term, secure customer. Public sector buildings are especially useful as anchor loads as they often provide predictable demand profiles.

190. Exemptions from the duty to prepare building assessment reports are allowed for by regulation in Section 53.

Evidence

191. The evidence recognised a need to improve the quality and use of information gathered from non-domestic buildings. There was a broad welcome for the introduction of Building Assessment Reports as a first step towards addressing the retrofit question; however, some witnesses proposed they should not apply just to public buildings. Concerns were also raised regarding inaccuracies in Energy Performance Certificates (EPC) methodology, potentially leading to under/oversizing of systems.

192. Aberdeen Heat and Power (AHP) said—

” *...the requirement to produce building assessment reports should not be too onerous, especially if the data required...is essentially the same as the data required to produce an EPC.* ¹²⁰

193. The proposals were supported by Scottish Renewables (SR) who said information about energy demand was “*crucial*” though “*often*” hard to get. Aligning building assessments with EPCs could “*substantially strengthen*” the quality of information and help grow the sector. ¹²¹

194. SGN believed it “*crucial*” that councils were provided with the information to consider all “*potential options*” to decarbonise heat in their area—

” *If not, there is a risk that areas suitable for heat networks are not designated, and others where a local authority may have more capacity, are designated incorrectly.* ¹²²

195. CMA wanted improved “*transparency*” for information, including EPCs—

” *These should help consumers understand the cost and implication of living in a property with a heat network...We also note the role of property agents and private landlords in ensuring that pre-transaction information for potential house-purchasers is provided.* ¹²³

Scottish Government

196. Given the duty on public sector building owners to “*assess the viability*” of connecting to a heat network, the purpose of building assessment reports was to “*ensure*” they had enough data to do so.

197. The Minister said the “*initial focus*” on the public sector was because of the number – 20,000 premises in Scotland – and them being considered “*optimal buildings*” for anchoring heat networks—

” *...they usually have secure, long-term owners or tenants and they often have a substantial and predictable demand for heat, which helps with modelling for the heat network.* ¹²⁴

198. The duty could be extended in the future if it proved “*challenging*” to find anchor loads via “*commercial negotiations*”. However, the Minister was keen not to add unnecessarily to the “*burden*” currently faced by the business community. ¹²⁵

199. The methodology for a building assessment report was being developed by Zero Waste Scotland, a first draft expected by the end of the year. James Hemphill suggested the assessment was not expected to be “*resource-intensive*” and could be completed by a building or facilities manager; the aim being to help a developer understand “*how efficiently*” a building might be retrofitted and the cost—

” *It will contain information that is readily available to those people, such as the heating bill or anything that is part of their climate change reporting duties, such as their annual energy consumption, or whether the building uses a wet system with radiators.* ¹²⁶

Conclusions

200. **Building assessment reports were broadly welcomed by witnesses as a means to provide the data to assess the viability of a heat network. The focus on the public sector for anchoring purposes had a clear rationale and the Minister said the duty could be extended in the future if commercial negotiations did not produce the required results. The Committee acknowledges the wish not to add to the burden the business community is facing at the present time. We do though recommend the Scottish Government commit to review the impact of this approach after three-to-five years of the legislation coming into force in order to inform any necessary adjustment.**

Part 6 – Powers of licence holders

201. Part 6 provides heat networks licence holders with various special rights and powers, similar to those held by gas and electricity companies (utility providers).
202. Section 57 allows a licence holder (with the authorisation of Ministers) to compulsorily acquire land required in connection with the construction or operation of a heat network.
203. Sections 58 - 63 relate to Wayleave Rights. The creation of a "*network wayleave right*" enables licence holders to install pipework and other apparatus up to a building; however, the owner would be under no obligation to use the system or to become a customer. It would be up to the operator to design a heat tariff which is attractive to building owners and tenants.
204. A framework for compensation is set out in sections 63 and 67. This applies where the licence holder (or authorised person acting on behalf of the licence holder)—
- Causes damage to the land (or something on the land)
 - Disturbs a person's enjoyment of the land
205. Concerning road work rights, the Policy Memorandum indicated the intention to bring forward an amendment on the basis—
- ” *The Bill does not currently make provision for road work rights as the Scottish Government requires to undertake further engagement with relevant roads stakeholders to ensure that any such provisions are compatible with the long-established governance processes regarding the access to roads by utility providers.*

Evidence

206. There was a welcome for the introduction of compulsory purchase rights where voluntary wayleaves cannot be agreed. Detailed evidence was heard in relation to the creation of real rights, and the need for wayleaves to be registered.
207. Vattenfall agreed with the statutory undertaker rights proposed in the Bill and considered that it struck "*more or less the right balance*". However, it found it "*difficult*" to understand how the powers would secure connection to anchor loads—
- ” *Necessary wayleave will only be relevant to connections to existing buildings, as building regulations will drive assessment of heat network suitability in new build situations. This needs to be addressed.* ¹²⁷
208. SGN considered the powers under Part 6 "*fully comprehensive*" and expected them to help "*grow the market*"—
- ” *However, we believe this may come at a cost of damaging relationships with land owners and the public. To ensure stakeholder buy-in for heat networks, we feel alternative methods should be fully explored before compulsory action is taken.* ¹²⁸

209. Professor Roddy Paisley, a specialist in land law from the University of Aberdeen, made a series of detailed points which are summarised below.
210. Section 58 was “*somewhat oddly drafted and lacks clarity*” as it “*does not confer [the] primary right [to transfer thermal energy] in any form expressly*”. The drafting suggested “*closed list of ancillary rights*”, but—
- ” *Not only will there be circumstances unforeseen by the draftsman (probably not a person well practiced in digging trenches or drains) that require rights that are not specified – e.g. the removal of spoil dug out of the ground – who owns it? Who can dump it? [...] but every word used in the existing list in the draft Bill needs to be construed to produce a workable result.* ¹²⁹
211. He recommended that a general clause be inserted so “*ancillary rights listed are without prejudice to a more general collection of ancillary rights*”. ¹³⁰
212. In relation to positive prescription (the creation of real rights through the passage of time), he thought it “*prudent*” for “*some admission*” for a wayleave right to be created “*in terms of Prescription and Limitation (Scotland) Act 1973, s.3(2)*”—
- ” *First of all the failure to allow positive prescription removes the possibility of cure if the wayleave is obtained from the wrong person or the right person in the wrong capacity. It is a complex task working out who really owns land and in what capacity. A very good example of the latter is working out whether land is held in the common good by a local authority. Secondly, what happens if the pipe is put in the wrong place? If it is not possible to create a wayleave for heat transfer by positive prescription, prescription will not operate as a cure even if the pipe has been there for twenty years...pipes are rarely exactly where you expect them to be. I think it will be overly sanguine to expect the builder’s shovel to conform in every or even most situations with the lawyer’s pen. Pipes tend to be bent round obstacles on the ground in informal manner to cut costs of digging. The clerk of works is not even told far less the instructing client or landowner.* ¹³¹
213. Section 59 risked leading to a “*degree of paralysis*” as “*heat transfer channels*” were put in “*areas where it is difficult or impossible to trace the owner e.g. the solum of a road*”. He suggested an “*additional ground*” for the grant of a necessary wayleave so the licence holder could certify they had been unable to identify the land’s owner “*with sufficient certainty*”. ¹³²
214. Section 60 was considered in need of “*wholesale redrafting*” and was Professor Paisley’s “*key recommendation*”—
- ” *It refers to parties bound by the wayleave right as the “owner” and “occupier”. This is English inspired nonsense. At the moment that does not even bind a bank having a security over those subjects. It does not bind those with other non-possessory rights in the land. It does not bind those who exercise public rights of way or the public right to roam under the Land Reform (Scotland) Act 2003...it certainly does not bind third parties outwith that short list. The solution is simply to declare in the Bill the network wayleave right to be a “real right”.* ¹³³

215. If a real right was created, it would mean that S65(8) would not be necessary, as “*obstruction can be restrained by civil process very easily if the right is a real right*”. Furthermore—
- ” *At the minute the section reads like a half-baked import from England or Ireland where the notion of real rights is weak and recourse to the criminal law of trespass is needed to bolster their ideas. In Scotland we can do better than this.* ¹³⁴
216. He said the term “wayleave” was “*commonly used*” but an “*absolute shambles in Scots law*” and “*only enforceable against the other party*”—
- ” *It would not be a good idea to model what you propose to do in the bill on what is already in legislation, drafted by the Westminster Parliament, which has not got the foggiest clue about how Scots law works.* ¹³⁵
217. In the interests of “*stress testing*” Professor Paisley’s critique of the Bill, the Committee contacted Scott Wortley – a solicitor and lecturer in private law at the University of Edinburgh – whose thoughts included—
- “*The use of the expression “wayleave” can be a little problematic. It is not a defined technical term in Scots law and can be used in a variety of ways...While the precise meaning of wayleaves in Scots law is unclear...it has become used as the standard expression for rights over land (including rights of use and entry) required by public authorities or providers of certain public services.*”
 - “*The specific nature of the wayleave right depends on the legislation which creates it. It should be noted though that it is not the default position that wayleaves are registered. Generally, the existence of the right if given its status through the wording of the statute rather than through appearing on the property register...*”
 - “*A personal right is a right which is enforceable by one person against another. Where there is a personal right the person against whom the right is enforceable typically comes under a correlative obligation... A real right is a right in a thing, in a piece of property. A real right is, it is said, enforceable against the world. This means that the right can be asserted successfully against anyone who challenges the right.*”
 - “*As Professor Paisley notes in his evidence where the holder of a “wayleave” has a real right the holder is in a stronger position against potential infringement of the right than if the right held by the holder of the wayleave is purely contractual.*”
 - “*Part 6 of the bill includes the provisions on wayleaves. It contains rules on compulsory acquisition (which is similar to various other regimes)...I should note that I am not clear what the distinction is meant to be between a right and an interest in or over land in clause 57...In statutory interpretation every word of legislation will be presumed to have a meaning...I find it odd that 20 years after the feudal legislation that new legislation from the parliament will revive the idea of interests in land.*”

- *“I agree with Professor Paisley’s concerns about the wording of clause 60. It lists parties who are affected rather than making general provision. What about a party who is not an occupier or owner of property...A real right is a fundamental concept in Scots property law...There may of course be a reason for the current wording in the bill and the potential exclusion of parties such as heritable creditors or others on the property. But it looks awkward to me. For example, as worded a wayleave agreement would not cover squatters on the property...Such a problem would not arise if it was provided that necessary wayleaves and wayleave agreements were real rights.”*
- *“Regarding registration I understand the motivation of wanting a clear transparent land register identifying the rights and obligations which apply to land...However...Not registering would be in keeping with the general approach to wayleaves in other contexts...Also if there is a requirement to register this introduces some other issues...Would registration expressly be permitted or required (to fit with the wording of s 9 of the 2012 Act)? If only permitted and not required would that be worthwhile given that it would not ensure transparency of the register? If required who would pay for registration, the holder of the right, the appropriate local authority, or the burdened owner? What cost of registration would be envisaged? Would the Keeper have a view on the possible impact in the D section in the register and the desirability of introducing statutory rights in there?”* ¹³⁶

218. Mr Wortley suggested the Scottish Government could “*provide analysis*” of such matters to help inform better consideration of the question of wayleaves versus real rights—

” *I think these are policy questions for the consideration of the committee rather than something on which I could give a clear legal view.* ¹³⁷

219. In relation to road work rights, the Society of Chief Officers of Transportation in Scotland (SCOTS) said it was “*difficult to comment*” on the implications for roads authorities without seeing the amendment to grant statutory powers to licence holders. ¹³⁸

220. Whether the use of “land” in the Bill included roads was of concern to the Society, citing “*potential clashes*” with the Roads (Scotland) Act 1984 and the New Roads and Street Works Act 1991. It suggested public roads be “*explicitly excluded*” on that basis. ¹³⁹

Scottish Government

221. The Minister described heat networks as “*unusually long-term investments*” that would take 15-40 years to recoup the investment. He said part 6 “*largely*” followed the provisions from electricity legislation, providing “*equivalent rights*” held by other utilities—

” *One difference is that network wayleave rights would bind any subsequent owners of and tenants on the land.* ¹⁴⁰

222. He was “aware” of the evidence the Committee had received and receptive to any suggestions for tightening up this part of the Bill—

” *...we have also become aware of the potential to augment part 6 to ensure that the rights are recorded transparently and are accessible, as Professor Paisley alluded to in his evidence. We would be happy to consider, alongside the committee, how that can best be done.* ¹⁴¹

Conclusions

223. **Compulsory purchase rights are to apply where voluntary wayleaves cannot be agreed. We heard concern that wayleaves would only be relevant to existing buildings, and also a risk to stakeholder goodwill and buy-in from taking compulsory action. The Committee asks the Scottish Government to detail how building regulations or other means might be used in the case of new builds, and what regulation or guidance will be provided for network licensees to explore all available options before matters are escalated to compulsion.**
224. **Detailed and highly technical evidence was heard in relation to wayleaves, legal definitions, and the creation of real rights. We sought to stress test Professor Paisley’s views and analysis with an assessment from University of Edinburgh’s Scott Wortley. The Committee recommends the Scottish Government reflect on both the critique and the commentary on and questions arising from that critique – in policy, drafting and technical terms; and – given the Minister’s acknowledgement of the potential to augment Part 6 in respect of transparency and accessibility of rights – prior to the Stage 1 debate that it provide an analysis of the key points and an outline at least of how this part of the Bill can be strengthened at Stage 2.**
225. **Recognising the Society of Chief Officers of Transportation in Scotland’s point that it was difficult to comment on road work rights without seeing the wording, we ask the Scottish Government to provide sight of its proposed amendment at the earliest opportunity.**

Part 8 – Miscellaneous provisions

226. Part 8 covers general and miscellaneous matters, including provision for Crown application, various enabling powers, and the commencement of the Bill. The Committee takes no view on these.

General principles of the Bill

227. The Committee welcomes the introduction of this framework Bill, the regulation of the emerging heat networks market having been recommended by the Competition and Markets Authority.
228. The aim of the Bill is to encourage the development of heat networks in Scotland in order to help reduce carbon emissions and tackle fuel poverty while promoting consumer protection.
229. It is a technical bill with substantial delegated powers. The Committee welcomes the Scottish Government's commitment that more detail and appropriate public consultation will be forthcoming as those instruments are drawn up. That high level approach notwithstanding, we would like to see a clearer commitment to consumer protection, public involvement and local input in the growth of heat networks. The Committee believes that public engagement and support to design, develop and promote heat networks must be central to the ethos and framing of this Bill.
230. We draw particular attention to those paragraphs in which we made recommendations or sought further detail or assurances—
- We ask that the Scottish Government keeps us updated on the progress of discussions with the UK Government and Ofgem (paragraph 82);
 - We invite the Scottish Government to clarify the future development of the licensing and regulatory regime (paragraph 83);
 - The Committee asks the Scottish Government to further reflect on the inclusion of an appeals process in the Bill, whether there may be scope for an amendment to provide for this, and, if not, what further assurances it can provide as to the opportunity and transparency of a right to appeal (paragraph 84);
 - We seek further detail on the Minister's indication that it would be sensible not to apply the requirement to hold a licence to those networks serving only the owner's premises (paragraph 86);
 - The Committee invites the Scottish Government to reflect on the evidence heard in favour of including fuel poverty on the face of the Bill, discuss further with its Scottish Fuel Poverty Partnership Forum, and – in advance of the Stage 1 debate – bring forward a proposal for how best to address the policy imperative of fuel poverty within the wording of the legislation (paragraphs 131 and 132);
 - We invite the Scottish Government to set out how it will address the absence of a formal role for communities and local authorities in the planning and consent of heat network schemes, ensure consumer protection, and bring about a step change in public engagement and awareness of the role of heat in carbon reduction (paragraphs 133, 135, 137, 141, 142, 143 and 182);

- **The Committee believes it is desirable for the balance of powers between Ministers and local government to be modified over time and the Bill should make provision for this (paragraph 136);**
- **We invite the Scottish Government to reflect on whether its ambitions for the impact of the Bill are on a level with those already set out for tackling climate change and pursuing a green recovery (paragraph 139);**
- **The Committee asks what the expected timeframe is for new heat networks coming into operation under the framework of this legislation (paragraph 139);**
- **We suggest the Scottish Government consider presenting a case study on heat networks at COP26 (paragraph 140);**
- **The Committee invites the Scottish Government to share the wording of the policy that will inform the statutory underpinning for Local Heat and Energy Efficiency Strategies prior to Stage 2 (paragraph 183);**
- **We ask the Scottish Government to provide further details in respect of—**
 - **The budget for LHEES and how costs will be shared with local authorities;**
 - **The stage of development and expected timing of that secondary legislation;**
 - **An update on progress with the pilot scheme and its likely completion date;**
 - **How it views the correlation between LHEES and heat networks; and**
 - **Any issues it has identified which could arise from the time-lag between the Bill and LHESS (paragraph 184);**
- **In terms of what was dubbed “demand risk”, we seek more detail on what the Scottish Government considers can be achieved either through the Bill or via other levers (paragraph 186);**
- **The Committee invites the Scottish Government to further outline its thinking on the question of multiple parties, consumer protection and accountability in the context of devolved consumer advocacy powers (paragraph 187);**
- **We recommend the Scottish Government reviews the impact of the focus on the public sector for anchoring purposes, and undertakes to do so after three-to-five years of the legislation coming into force (paragraph 200);**
- **The Committee asks the Scottish Government to detail how building regulations or other means might be used to promote heat networks for new builds; and what regulation or guidance will be provided for network licensees to explore all available options before matters are escalated to compulsion (paragraph 223);**

- **In relation to wayleaves, legal definitions, and real rights, we recommend the Scottish Government reflect on Professor Paisley’s critique and the commentary on and questions arising from that critique; and – given the Minister’s acknowledgement of the potential to augment Part 6 in respect of transparency and accessibility of rights – prior to the Stage 1 debate that it provide an analysis of the key points and an outline at least of how this part of the Bill can be strengthened at Stage 2 (paragraph 224);**
 - **We ask the Scottish Government to provide sight of its proposed amendment on road work rights (paragraph 225).**
231. **The Committee recommends that the Parliament agree to the general principles of this Bill.**

Annexes

Annex A - Minutes of Meetings

18th Meeting, 2020, Tuesday 23 June 2020

4. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from— Nicola Mahmood, Senior Business Development Manager, ENGIE; Eoghan Maguire, Director for Scotland and the North, Vattenfall UK; Claire Mack, Chief Executive, Scottish Renewables; Michael King, Director, Aberdeen Heat & Power.

5. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

25th Meeting, Tuesday 25 August 2020

4. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Dr Paul Moseley, Associate Director, Scottish Futures Trust;

Charlotte Owen, Policy Manager, The Association for Decentralised Energy;

Dr Keith Baker, Researcher, Built Environment Asset Management (BEAM) Centre.

7. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

26th Meeting, Tuesday 1 September 2020

2. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Gavin Mowat, Policy Adviser (Rural Communities), Scottish Land and Estates;

Tammy Swift-Adams, Director of Planning, Homes for Scotland;

Sarah-Jane McArthur, Member, Scotland's Energy Law Sub-Committee,

Law Society of Scotland;

Professor Roderick Paisley, Chair of Scots Law, University of Aberdeen

4. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

27th Meeting, Tuesday 8 September 2020

2. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Gavin Slater, Head of Sustainability, Glasgow City Council;

David Armitage, Roads Policy and Asset Manager, Aberdeenshire

Council, representing Society of Chief Officers of Transportation in Scotland (SCOTS);

Stacey Dingwall, Policy Lead in Energy Efficiency and Fuel Poverty, Scottish Federation of Housing Associations;

Aoife Deery, Senior Energy Policy Officer, Citizens Advice Scotland;

Scott Restricker, Technical and Training Manager, Energy Action Scotland;

Ken Brady, Programme Manager District Heating, Energy Saving Trust (EST).

3. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

30th Meeting, Tuesday 29 September 2020

2. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at

Stage 1 from—

James Lambert, Director, Competition and Markets Authority;

Charles Wood, Head of New Energy Services and Heat, Energy UK;

Marcus Hunt, Director, Commercial Services and Investments, SGN Commercial Services;

Donald MacBrayne, Business Development Manager, Scottish Water Horizons.

4. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

31st Meeting, Tuesday 6 October 2020

3. Heat Networks (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Paul Wheelhouse, Minister for Energy, Connectivity and the Islands, Urszula Kasperek, Senior Policy Advisor, Norman MacLeod, Senior Principal Legal Officer, and James Hemphill, Heat Networks Team Leader, Scottish Government.

4. Heat Networks (Scotland) Bill (in private): The Committee considered the evidence heard at today's meeting.

33rd Meeting, Tuesday 3 November 2020

Heat Networks (Scotland) Bill (in private): The Committee considered a draft Stage 1 report, various changes were agreed to, and the Committee agreed to consider a revised draft in private at a future meeting.

34th Meeting, Tuesday 10 November 2020

Heat Networks (Scotland) Bill (in private): The Committee considered and agreed a revised draft Stage 1 report and agreed arrangements for its publication.

Annex B - Written Evidence

Written Submissions to the [Call for Views](#)

- [Common Weal Energy Working Group & The Energy Poverty Research initiative](#)
- [Jonathan Coppock](#)
- [Highland Council \(Energy & Sustainability Team\)](#)
- [Scottish Renewables](#)
- [Scottish Road Works Commissioner](#)
- [John Birchmore, SHREWS Ltd](#)
- [Energy Action Scotland](#)
- [West Dunbartonshire Council](#)
- [Rayner Mayer, Sciotech Projects](#)
- [Association for Decentralised Energy](#)
- [National Grid](#)
- [Scottish Association of University Directors of Estates \(SAUDE\)](#)
- [SGN Commercial Services](#)
- [Aberdeen Heat and Power](#)
- [SSE Enterprise](#)
- [Hydracrat Ltd](#)
- [Society of Chief Officers of Transportation in Scotland \(SCOTS\)](#)
- [Glasgow City Council](#)
- [EAUC-Scotland](#)
- [Competition & Markets Authority](#)
- [Vattenfall](#)
- [Veitch CooperLtd](#)
- [Lochalsh and Skye Housing Association](#)
- [ScottishPower](#)

- [Ombudsman Services](#)
- [Citizens Advice Scotland](#)
- [WWF Scotland](#)
- [Homes for Scotland](#)
- [Heat Trust](#)
- [Law Society of Scotland](#)
- [Scottish Water](#)
- [Scottish Futures Trust](#)

Additional Evidence

- [Professor Roderick Paisley](#)
- [Energy Saving Trust](#)
- [Danish Energy Agency - Cover Letter](#)
- [Danish Energy Agency - Written Submission](#)
- [Scott Wortley](#)
- [Citizens Advice Scotland](#)
- [Scottish Water](#)
- [SGN Commercial Services](#)
- [Ofgem](#)
- [Homes for Scotland](#)

Late Submissions

- [The City of Edinburgh Council](#)

Correspondence

On 3 April the Committee wrote to the Minister for Parliamentary Business and Veterans regarding the Committee's consideration of the Bill. Graeme Dey replied on 22 April.

- [Letter to the Minister](#)
- [Minister's Response](#)

Following the session with the Minister on 6 October the Committee wrote to Paul Wheelhouse requesting follow up information. The Minister responded on 16 October.

- [Letter to the Minister](#)
- [Minister's response](#)

Annex C - Work by other Committees and SPICe

[Heat Networks \(Scotland\) Bill - SPICe Briefing](#)

On 25 September, the Delegated Powers and Law Reform Committee reported on the Bill at Stage 1.

[Heat Networks \(Scotland\) Bill: Stage 1](#)

- 1 Scottish Government. (2020, March 3). Heat Networks Bill. Retrieved from <https://www.gov.scot/news/heat-networks-bill/> [accessed 5 May 2020]
- 2 Competition and Markets Authority. (2018, July 23). Heat Networks Market Study. Final report. Retrieved from https://assets.publishing.service.gov.uk/media/5b55965740f0b6338218d6a4/heat_networks_final_report.pdf [accessed 12 May 2020]
- 3 See pages 18-19 of the [Policy Memorandum](#).
- 4 See pages 16-18 of the [Policy Memorandum](#).
- 5 [Written submission](#), DEA.
- 6 [Written submission](#), DEA.
- 7 [Written submission](#), DEA.
- 8 [Written submission](#), The Association for Decentralised Energy.
- 9 [Written submission](#), Energy Saving Trust.
- 10 [Written submission](#), Vattenfall.
- 11 [Written submission](#), Law Society of Scotland.
- 12 EEFW Committee, Official Report, 1 September 2020, Col 3.
- 13 [Written submission](#), SGN Commercial Services.
- 14 EEFW Committee, Official Report, 6 October 2020, Col 26.
- 15 [Letter from the Minister](#), 16 October 2020.
- 16 [Letter from the Minister](#), 16 October 2020.
- 17 [Written submission](#), Ofgem.
- 18 [Written submission](#), CMA.
- 19 EEFW Committee, Official Report, 23 June 2020, Col 11.
- 20 [Written submission](#), SGN Commercial Services.
- 21 EEFW Committee, Official Report, 8 September 2020, Col 20.
- 22 EEFW Committee, Official Report, 8 September 2020, Col 20.
- 23 [Written submission](#), Ofgem.
- 24 [Written submission](#), Ofgem.
- 25 [Written submission](#), Ofgem.
- 26 [Written submission](#), Ofgem.

- 27 EEFW Committee, Official Report, 6 October 2020, Col 29.
- 28 EEFW Committee, Official Report, 6 October 2020, Col 29.
- 29 EEFW Committee, Official Report, 6 October 2020, Col 30.
- 30 EEFW Committee, Official Report, 6 October 2020, Col 30.
- 31 EEFW Committee, Official Report, 6 October 2020, Col 32.
- 32 EEFW Committee, Official Report, 6 October 2020, Col 40.
- 33 [Letter from the Minister](#) , 16 October 2020.
- 34 [Letter from the Minister](#) , 16 October 2020.
- 35 [Letter from the Minister](#) , 16 October 2020.
- 36 [Written submission](#) , CMA.
- 37 [Written submission](#) , Ofgem.
- 38 [Written submission](#) , Ofgem.
- 39 [Written submission](#) , SR.
- 40 [Written submission](#) , Vattenfall.
- 41 [Written submission](#) , Ofgem.
- 42 EEFW Committee, Official Report, 25 August 2020, Col 23.
- 43 EEFW Committee, Official Report, 1 September 2020, Col 4.
- 44 EEFW Committee, Official Report, 6 October 2020, Col 31.
- 45 EEFW Committee, Official Report, 6 October 2020, Col 33.
- 46 EEFW Committee, Official Report, 6 October 2020, Col 31.
- 47 EEFW Committee, Official Report, 6 October 2020, Col 32.
- 48 EEFW Committee, Official Report, 6 October 2020, Col 31.
- 49 EEFW Committee, Official Report, 6 October 2020, Col 32.
- 50 [Written submission](#) , SR.
- 51 [Written submission](#) , Ofgem.
- 52 EEFW Committee, Official Report, 23 June 2020, Col 33.
- 53 EEFW Committee, Official Report, 8 September 2020, Col 5.
- 54 EEFW Committee, Official Report, 8 September 2020, Cols 22-23.
- 55 [Written submission](#) , CAS.

- 56 [Written submission](#), CAS.
- 57 [Written submission](#), CAS.
- 58 [Written submission](#), LSS.
- 59 [Written submission](#), LSS.
- 60 [Written submission](#), Ofgem.
- 61 [Written submission](#), Ofgem.
- 62 [Written submission](#), Ofgem.
- 63 [Written submission](#), Ofgem.
- 64 EEFW Committee, Official Report, 6 October 2020, Col 26.
- 65 EEFW Committee, Official Report, 6 October 2020, Col 47.
- 66 EEFW Committee, Official Report, 6 October 2020, Col 37.
- 67 EEFW Committee, Official Report, 6 October 2020, Col 26.
- 68 EEFW Committee, Official Report, 6 October 2020, Col 34.
- 69 EEFW Committee, Official Report, 6 October 2020, Col 35.
- 70 EEFW Committee, Official Report, 6 October 2020, Col 42.
- 71 [Letter from the Minister](#), 16 October 2020.
- 72 [Letter from the Minister](#), 16 October 2020.
- 73 [Letter from the Minister](#), 16 October 2020.
- 74 [Letter from the Minister](#), 16 October 2020.
- 75 EEFW Committee, Official Report, 6 October 2020, Col 26.
- 76 EEFW Committee, Official Report, 6 October 2020, Col 37.
- 77 [Letter from the Minister](#), 16 October 2020.
- 78 EEFW Committee, Official Report, 6 October 2020, Cols 37-38.
- 79 EEFW Committee, Official Report, 6 October 2020, Col 38.
- 80 EEFW Committee, Official Report, 6 October 2020, Col 38.
- 81 EEFW Committee, Official Report, 6 October 2020, Col 59.
- 82 EEFW Committee, Official Report, 6 October 2020, Col 59.
- 83 EEFW Committee, Official Report, 6 October 2020, Col 60.
- 84 EEFW Committee, Official Report, 6 October 2020, Col 45.

- 85 EEFW Committee, Official Report, 6 October 2020, Col 46.
- 86 [Letter from the Minister](#) , 16 October 2020.
- 87 EEFW Committee, Official Report, 6 October 2020, Col 36.
- 88 [Letter from the Minister](#) , 16 October 2020.
- 89 EEFW Committee, Official Report, 6 October 2020, Col 57.
- 90 [Heat Policy Statement - Towards Decarbonising Heat: Maximising the Opportunities for Scotland](#) .
- 91 EEFW Committee, Official Report, 23 June 2020, Col 6.
- 92 EEFW Committee, Official Report, 23 June 2020, Col 6.
- 93 EEFW Committee, Official Report, 23 June 2020, Col 15.
- 94 [Written submission](#) , Glasgow City Council.
- 95 [Written submission](#) , Highland Council.
- 96 EEFW Committee, Official Report, 6 October 2020, Col 48.
- 97 EEFW Committee, Official Report, 6 October 2020, Col 48.
- 98 EEFW Committee, Official Report, 6 October 2020, Col 48.
- 99 EEFW Committee, Official Report, 6 October 2020, Col 49.
- 100 [Written submission](#) , ADE.
- 101 EEFW Committee, Official Report, 23 June 2020, Col 22.
- 102 [Written submission](#) , Energy Saving Trust.
- 103 [Written submission](#) , Energy Saving Trust.
- 104 [Written submission](#) , LSS.
- 105 [Written submission](#) , Homes for Scotland.
- 106 EEFW Committee, Official Report, 8 September 2020, Col 27.
- 107 EEFW Committee, Official Report, 8 September 2020, Col 17.
- 108 EEFW Committee, Official Report, 6 October 2020, Col 50.
- 109 EEFW Committee, Official Report, 6 October 2020, Cols 50-52.
- 110 EEFW Committee, Official Report, 6 October 2020, Col 52.
- 111 EEFW Committee, Official Report, 6 October 2020, Col 52.
- 112 EEFW Committee, Official Report, 6 October 2020, Cols 52-53.

- 113 EEFW Committee, Official Report, 6 October 2020, Col 53.
- 114 EEFW Committee, Official Report, 6 October 2020, Col 53.
- 115 [Written submission](#) , Ofgem.
- 116 EEFW Committee, Official Report, 6 October 2020, Col 53.
- 117 EEFW Committee, Official Report, 6 October 2020, Col 54.
- 118 EEFW Committee, Official Report, 6 October 2020, Cols 54-55.
- 119 EEFW Committee, Official Report, 6 October 2020, Col 55.
- 120 [Written submission](#) , AHP.
- 121 [Written submission](#) , SR.
- 122 [Written submission](#) , SR.
- 123 [Written submission](#) , CMA.
- 124 EEFW Committee, Official Report, 6 October 2020, Cols 55-56.
- 125 EEFW Committee, Official Report, 6 October 2020, Col 56.
- 126 EEFW Committee, Official Report, 6 October 2020, Col 57.
- 127 [Written submission](#) , Vattenfall.
- 128 [Written submission](#) , SGN Commercial Services.
- 129 [Written submission](#) , Professor Roderick Paisley.
- 130 [Written submission](#) , Professor Roderick Paisley.
- 131 [Written submission](#) , Professor Roderick Paisley.
- 132 [Written submission](#) , Professor Roderick Paisley.
- 133 [Written submission](#) , Professor Roderick Paisley.
- 134 [Written submission](#) , Professor Roderick Paisley.
- 135 EEFW Committee, Official Report, 1 September 2020, Cols 6-7.
- 136 [Written submission](#) , Scott Wortley.
- 137 [Written submission](#) , Scott Wortley.
- 138 [Written submission](#) , SCOTS.
- 139 [Written submission](#) , SCOTS.
- 140 EEFW Committee, Official Report, 6 October 2020, Col 61.
- 141 EEFW Committee, Official Report, 6 October 2020, Cols 61-62.

