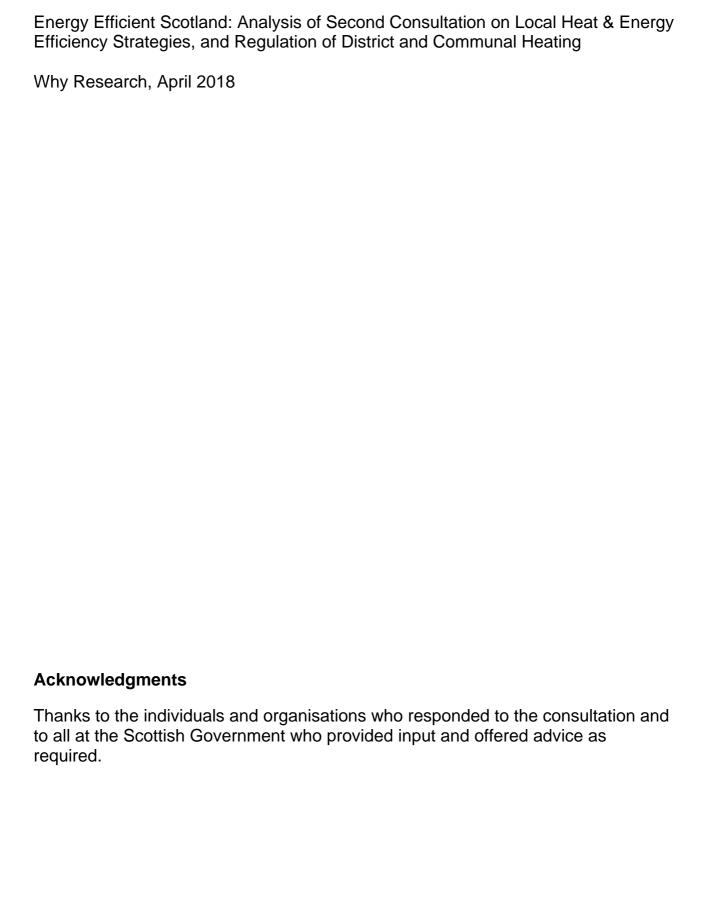
Energy Efficient Scotland: Analysis of Second Consultation on Local Heat & Energy Efficiency Strategies, and Regulation of District and Communal Heating

Why Research, April 2018







Contents

Executive Summary	1
Introduction	10
Background	10
Respondent Profile	10
Methodology	11
Local Heat & Energy Efficiency Strategies	13
Local Heat & Energy Efficiency Strategies	13
Statutory Duty to Report on Tackling Fuel Poverty and Climate Change	18
District Heating Zones	20
District Heating Consenting	23
Socio-Economic Assessment	26
Data for Local Heat & Energy Efficiency Strategies	28
Further Call for Evidence on industry heat data	30
District Heating Licensing	36
Licensing for District and Communal Heating	36
Consumer Protection	37
Enabling Connections	42
Heat Users	42
Surplus Heat Suppliers – Further call for evidence	43
Enabling Activity and Additional Areas for Consideration to Support the Regulatory Approach	49
Incentives	
Wider UK Heat Market Reform	
Assessing Impact	
Equality	
Business and Regulation	
Potential costs	
Potential savings	
Privacy	
Annendix: Respondent organisations	63

Executive Summary

Introduction

- 1. This executive summary provides a summary of the key findings emerging at each consultation question. The following chapters of this report then provide further detail and depth on the responses to each question.
- 2. In January 2017, the Scottish Government held a scoping consultation on Local Heat & Energy Efficiency Strategies (LHEES) and Regulation of District Heating, designed to gather views to help inform further development of the proposals prior to more detailed consultation.
- 3. In November 2017, the Scottish Government launched a second consultation, based on the evidence and views gathered from stakeholders. This consultation document set out more specific policy proposals for Local Heat & Energy Efficiency Strategies and Regulation of District and Communal Heating. It ran from November 2017 until February 2018.

Respondent Profile

4. 71 organisations and individuals, from the following respondent sub groups, submitted a response to the consultation:

Respondent Groups

	resoperiusine Groups	
	Number	
Business & Industry	16	
Network, Professional or Trade body	14	
Local government	20	
Third sector & Community	9	
Public sector	5	
Academic	3	
Other	1	
Total organisations	68	
Individuals	3	
Total respondents	71	

Main Findings: Local Heat & Energy Efficiency Strategies

Local Heat & Energy Efficiency Strategies

- 5. Most of those who replied agreed with the proposed approach to place a statutory duty upon local authorities to work with relevant stakeholders to produce Local Heat & Energy Efficiency Strategies (LHEES).
- 6. There were requests for more information on the resources and support that will be made available to local authorities (e.g. when this will be delivered, amounts, length of funding period etc).
- 7. Respondents also commented on the need for more interim targets or milestones to be set within the 15-20 year period.
- 8. There were calls for clarity as to how LHEES will be reported, monitored and measured and suggestions that each LHEES will need regular reviewing or updating.
- 9. Several respondents were keen for local authorities (LAs) to work together or co-ordinate their efforts.

Statutory Duty to Report on Tackling Fuel Poverty and Climate Change

10. Of those responding to this question, a significant minority were broadly supportive of reporting about climate change and, to a lesser extent, fuel poverty, in the LHEES rather than in the Local Housing Strategy (LHS). A key reason was that this will help to align the areas of energy efficiency, carbon reduction and fuel poverty. A significant number of respondents noted the need for reporting to have a joined-up approach with other developments across Scottish heat policy. A key concern was that of resources, funding and support that will be needed to carry out the LHEES reporting requirements.

District Heating Zones

- 11. There was majority support across all respondent sub-groups for the proposed overall approach to zoning. A significant minority of respondents focused on factors to help with take-up of programmes aimed at energy efficiency, with some highlighting the need for commercial attractiveness and good conditions for investment, alongside funding. There were some concerns as to whether the zones will provide sufficient certainty to enable providers to commit to investment.
- 12. Community engagement was perceived to be a factor that would help with take-up and, alongside this, respondents referred to the need for district heating to be affordable to consumers. There were also suggestions for collaborative working across stakeholders at regional and national levels, reference to the need for more or improved data to be available in order to

make zoning effective, and the need for the power to compel building owners to connect.

District Heating Consents

- 13. A majority of those answering this question noted their approval of the proposed district heating consent process or specific elements of what was being proposed, with local authorities being particularly supportive of the development of national guidance and support, noting that this would mean a consistent approach across Scotland. There was no outright disagreement with the proposed district heating consent process or specific elements of what was being proposed.
- 14. In relation to the developer of last resort, the preference from a majority of respondents was for a national body to adopt this role; primarily due to a lack of resources for local authorities to be able to take on this role. That said, there were also comments that the developer of last resort would need to be adequately resourced. A range of different organisation types including a national body or an independent body, were suggested as suitable for the role although there was no consensus on this.
- 15. In terms of the consents process specifically, there were some comments that local authorities do not have the necessary resources to be able to manage this, alongside suggestions for a central body that would issue and manage consents. There was some support for the consent process to be subject to the normal planning consent process, albeit this opinion was not universally held; and a very small number of respondents felt that the consenting process should be separate from the planning process. There were some calls for a robust system of monitoring schemes and reference to the need for accountability and transparency.
- 16. Most of those answering agreed that district heating operators should have similar or the same rights as other statutory undertakers for permitted development and wayleaves albeit that there was reference to the need for local authorities to have the necessary resources to undertake this role.
- 17. There were some requests for heat networks to be treated in the same way as other utilities in terms of reduced business rates and any other taxation breaks.

Socio-Economic Assessment

18. There was broad agreement for socio-economic assessment to be included as part of LHEES. The need for a whole systems approach that aligns with other policy areas such as the overall objective of reducing fuel poverty or climate change was cited by some respondents. However, some respondents in the business & industry sector and the network, professional and trade body sector commented that consideration also needs to be given to market demand and the commercial viability of each proposal. There were also suggestions that the Scottish Government

- should conduct an additional assessment prior to the ones already identified in order to scope and identify suitable areas of consideration for LHEES and exemptions to the policy, prior to placing a duty on local authorities.
- 19. A significant minority of respondents welcomed the commitment to provide statutory guidance for socio-economic assessment in the form of a detailed methodology, laying out an overarching process and providing standard assumptions. They felt this would ensure consistency across local authorities and stakeholders.
- 20. Reference was made to the need for the process for socio-economic assessment to be accessible, consistent, comprehensible, and transparent; with requests that this should not be overly burdensome or time consuming. There were also some suggestions for the effectiveness of socio-economic assessment to be reviewed on a regular basis, and for best practice to be developed as skills develop.

Data for Local Heat & Energy Efficiency Strategies

- 21. A small number of respondents noted their support for proposals for data for LHEES, with comments that local authorities need a comprehensive picture of heat demand and surplus heat.
- 22. Views were mixed as to whether data on surplus heat should be provided on a voluntary basis, with some noting that voluntary measures are unlikely to obtain the required data for the development of LHEES. Allied to this, there were some suggestions for industry to provide energy consumption data on a mandatory basis, although this was not generally supported by data providers on the basis that this could be commercially sensitive information.

Further Call for Evidence for industry heat data

- 23. Only small numbers of respondents referred to types of data information that industry might be willing to provide, instead referring to data protection requirements, the need to anonymise data or the commercial sensitivity of data. There were some suggestions that central management of data would help resolve these issues.
- 24. There were a small number of references to data that is already available such as Standard Assessment Procedure (SAP) or Energy Performance Certificates (EPC), albeit that there were some comments that there are limitations on what is currently available.
- 25. The need to engage directly with industry and professional associations was cited by some respondents, primarily in local government or network, professional and trade bodies; along with the need to offer reassurances that data will be treated as confidential or suggestions that confidential data sharing agreements should be used to allay industry concerns.

- 26. A few respondents suggested the Scottish Government would need to mandate organisations to provide the required data.
- 27. Only a small number of respondents cited any data that could be provided without compromising the effectiveness of organisations, although there were some comments that some data is already publicly available.

Main Findings: District Heating Licensing

Licensing for District and Communal Heating

- 28. There was broad support for the overall approach to district heating licensing, with various advantages being cited; these included consumer protection and consistent standards around service levels, service contracts and continuity of supply. A licensing system was felt to be important by some because district heating operators will effectively operate a supply monopoly.
- 29. Independent scrutiny, monitoring and evaluation were seen to be important by a few respondents across most sub-groups, alongside regular reviews to ensure that district heating networks are meeting their aims. While there was broad support for a licensing system, a very small number of respondents, primarily in the business & industry sector, felt there is a need to strike a balance between the obligations placed upon developers or operators and the rights to facilitate developments. Concerns over the challenge of enforcement were raised by a few respondents in the business & industry and network, professional and trade body sectors.
- 30. There were some suggestions that licensing requirements should build upon the content of the Heat Trust or that awarding a licence should be dependent on registration with the Heat Trust and the Association for Decentralised Energy's (ADE) forthcoming compliance scheme, particularly as this would ensure regulatory alignment over the UK.

Consumer Protection

- 31. A significant minority of respondents noted their support for what was being proposed in relation to consumer protection, with some suggestions that this could be built into the consent and procurement processes.
- 32. Some respondents, primarily within local government, business & industry and network, professional and trade body sub-groups, noted a preference for mandatory, rather than voluntary, protection schemes, based on the standards developed in the Heat Trust Scheme Rules, although there were some requests from business & industry respondents for a balance so that protection is fair and proportionate, offering protection to the consumer while also encouraging development.

- 33. Ongoing dialogue with the UK Government was important to some respondents, so that Scotland and the rest of the UK would adhere to the same standards and avoid regulatory divergence. There was also reference to the forthcoming Competition and Markets Authority Review into domestic heat networks, with respondents noting that this should inform arrangements for consumer protection.
- 34. There was general support for a robust complaints resolution process, with requests for a district heating ombudsman service to include counselling and conciliation services to achieve dispute resolution. The complaints resolution service would need to be easy to access and use for consumers.
- 35. Given that district heating is a relatively unknown form of heating, respondents noted the need to increase awareness of its benefits through information campaigns, as well as providing jargon-free and consistent information via a range of different information channels. It was felt that advice should be offered by an independent and impartial organisation(s). Respondents cited a wide range of different types of advice that should be offered to consumers including advice on tariffs, prices, costs, billing, standards for billing, repairs and so on.

Enabling Connections

Heat Users

- 36. Almost half of respondents noted their support for the proposed approach to connecting heat users, although some had provisos. These included the need to raise awareness and educate consumers about the benefits of district heating as well as encouragement to connect. While not proposed in the consultation paper, a few respondents, primarily within the local government and business & industry sub-groups, spontaneously noted their support for the power to compel connection particularly for public sector organisations, although a similar proportion of respondents disagreed with the power to compel.
- 37. There were suggestions from some respondents in the business & industry sector and network, professional and trade bodies, that district heating should operate under a separate legal regime rather than under the planning process. This was because it was felt that other legislation exists to help reduce heat demand and that any new dwellings meeting 2015 building regulations will include low and zero carbon generating technologies.

Surplus Heat Suppliers - Further Call for Evidence

38. There was majority support for the proposed phased approach to nondomestic sectors with potentially usable surplus heat, although there were some references to the need for incentives to be offered to accommodate different drivers for different sectors and organisations to share surplus

- heat or for encouraging connection to help mitigate the long payback periods within this sector. There were also suggestions of a need to engage with organisations and the need for encouragement to engage.
- 39. While respondents felt that Phase 1 and Phase 2 are likely to be successful, not all were supportive of Phase 3; they felt that while the first two phases allow for collaboration, the third phase could bring together unwilling partners and could be of limited value.
- 40. There was support from a majority of those responding to this question to require all regulated non-domestic sectors with potentially usable surplus heat to carry out energy efficiency assessments, including heat (and its recovery), and onsite and offsite use, and implement recommendations where feasible, although there were some requests to define 'feasible'. Again, there were some suggestions that incentives need to be offered to ensure private sector compliance.
- 41. Respondents felt that energy efficiency (including heat) could be assessed across the regulated non-domestic sectors via The Energy Savings Opportunities Scheme (ESOS). Other suggestions for assessment were made but only by very small numbers of respondents.
- 42. There was support from around half the respondents answering this question for the existing energy efficiency requirements for Part A sites to be applied to Part B sites. A range of benchmarks or criteria were suggested for use in assessing energy efficiency; these included the sector or nature of an organisation's activities. Some existing approaches were cited, with most reference to the use of Energy Performance Certificates (EPCs) as a possible starting point.
- 43. Respondents felt that all industrial processes should be included in assessing energy efficiency.

Enabling Activity and Additional Areas for Consideration to Support the Regulatory Approach

- 44. There was majority support for the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES, district heating and Scotland's Energy Efficiency Programme (SEEP, now Energy Efficient Scotland) more widely. It was generally felt that the proposed functions were appropriate although some additional functions were also outlined.
- 45. There were some requests for flexibility so that the LHEES can offer an individualised approach taking into account local input.

46. Governance of the national delivery mechanism was an issue cited by some respondents, although there was no consensus on the type of governance that should be adopted.

Incentives

47. While various suggestions were made on the most cost-effective way of supporting schemes that are socio-economically appropriate and in line with the local authority LHEES, respondents tended to focus on grants, loans and incentives as they help to de-risk and progress projects. There were also calls for funding to be consistent, to have appropriate delivery lead times to allow for adequate planning, scoping and best value, and to be long term. There were some suggestions that business rates and rateable values could be reduced to provide greater confidence to network developers and owners.

Wider UK Heat Market Reform

- 48. Over half the respondents agreed with the consultation proposals.
- 49. There were some suggestions of a need to consider other technologies alongside district heating. There was also reference to feasibility studies currently being undertaken and the need for these to feed into evidence for the Scottish Government.
- 50. There was support for the approach published by the ADE Taskforce.

Main Findings: Assessing Impact

Equality

- 51. There was general agreement with the need to protect groups of people who may be more vulnerable to the impact of fuel poverty, with very few potentially negative impacts being outlined by respondents. There was reference of a need to engage with consumers.
- 52. Respondents noted the need to ensure that protected characteristics should be included and addressed in LHEES and that developing strong consumer protection will ensure that vulnerable groups are protected. Key themes emerging included that protected characteristics must be taken into account in the socio-economic assessment; that there is a need for training, guidance and examples of best practice; that there is a need for a wide ranging engagement process involving all relevant individuals and utilising a wide range of channels; and broad agreement that developers should adhere to considerate communication in terms of minimising disruption.

Business and Regulation

- 53. Respondents tended to focus on potential costs in relation to the Business and Regulatory Impact Assessment, rather than potential savings. The key cost identified was that local authorities would have increased costs due to the need for additional resources, staff and expertise. There was also some reference to potential costs for businesses because of the regulations under which they would have to operate.
- 54. Likely savings outlined included the potential for residents to make savings on their heating bills. There were also some suggestions that non-domestic organisations might have reductions in the Climate Change Levy, CRC Energy Efficiency Scheme or EU emissions trading system (EU ETS).

Privacy

55. The key theme emerging to this question was of the need for LHEES to incorporate the requirements of the Data Protection Act; and also some reference to the need to consider the new General Data Protection Regulation (GDPR) requirements being introduced in May 2018.

Introduction

Background

- 56. In January 2017, the Scottish Government held a scoping consultation on Local Heat & Energy Efficiency Strategies (LHEES) and Regulation of District Heating, designed to gather views to help inform further development of the proposals prior to more detailed consultation.
- 57. In November 2017, the Scottish Government launched a second consultation, based on the evidence and views gathered from stakeholders. This consultation document set out more specific policy proposals for Local Heat & Energy Efficiency Strategies and regulation of district and communal heating. It ran from November 2017 until February 2018.

Respondent Profile

- 58. There were 71 responses to the consultation: 68 from organisations and three from individuals. Respondents were assigned to respondent groupings in order to enable analysis of any differences or commonalities across or within the different types of organisations and individuals that responded.
- 59. A list of all those organisations that submitted a response to the consultation is included in Appendix 1. The local government category includes local authorities, local authority officer responses and related bodies such as the Convention of Scottish Local Authorities (COSLA). The business & industry group includes consultants, the power sector and house builders. The network, professional and trade body group includes trade bodies representing heavy industry.
- 60. The organisation categories with the highest numbers of respondents were 'business & industry', 'local government' and 'network, professional or trade body'.
- 61. The following table shows the numbers of responses in each analysis group.

Respondent Groups

	Number
Business & Industry	16
Network, Professional or Trade body	14
Local government	20
Third sector & Community	9
Public sector	5
Academic	3
Other	1
Total organisations	68
Individuals	3
Total respondents	71

Methodology

- 62. Responses to the consultation were submitted using the Scottish Government consultation platform Citizen Space or by email.
- 63. It should be borne in mind that the number responding at each question is not always the same as the number presented in the respondent table. This is because not all respondents addressed all questions; some commented only on those areas of relevance to their organisation, sector or field of interest. The report shows the number of respondents who replied to each question.
- 64. When referring to respondents who made particular comments, the terms 'a small number', 'a few' and so on have been used. While the analysis was qualitative in nature, as the questionnaire only contained a small number of quantifiable questions, as a very general rule of thumb it can be assumed that: 'a very small number' indicates around 3 or 4 or less respondents, 'a small number' indicates around 5-8 respondents; 'a few indicates around 8 to 10; and 'some' indicates over 10 but fewer than half of those who commented at any question.
- 65. The researchers examined all comments made by respondents at each open question and noted the range of issues mentioned in responses including reasons for opinions, specific examples or explanations, alternative suggestions or other related comments. Grouping these issues together into similar themes allowed the researchers to identify whether any particular theme was specific to any particular respondent group or groups. When looking at group differences however, it must be also borne in mind that where a specific opinion has been identified in relation to a particular group or

- groups, this does not indicate that other groups did not share this opinion, but rather that they simply did not comment on that particular point.
- 66. While the consultation gave all who wished to comment an opportunity to do so, given the self-selecting nature of this type of exercise, any figures quoted here cannot be extrapolated to a wider population outwith the respondent sample.
- 67. A small number of verbatim comments, from those who gave permission for their responses to be made public, have been used in the report to illustrate themes or to provide extra detail for some specific points.

Local Heat & Energy Efficiency Strategies

Local Heat & Energy Efficiency Strategies

- 68. The consultation document explained the Scottish Government considers that it would be appropriate to place a statutory duty upon local authorities to work with relevant stakeholders to produce a Local Heat & Energy Efficiency Strategy (LHEES), aimed at improving the energy efficiency and decarbonising the heat supply of their area under SEEP. They would also have a duty to report on progress.
- 69. Prior to commencement of a duty, local authorities would be offered capacity and support to develop LHEES.
- 70. The consultation also explained that strategies would cover a 15-20 year period and that development of a LHEES will include the following stages:
 - **Stage 1**: An assessment of existing local and national strategies and data availability.
 - **Stage 2**: Authority-wide assessment of existing building stock's energy performance and heat supply.
 - **Stage 3**: Authority-wide setting of aggregate targets for heat demand reduction and decarbonisation of buildings for the short-term strategy period and for the long-term duration of SEEP.
 - **Stage 4**: Conduct a socio-economic assessment of potential energy efficiency and heat decarbonisation solutions.
 - **Stage 5**: Selection of areas/prioritisation of opportunities for energy efficiency and/or heat decarbonisation, leading to the designation of zones.
 - **Stage 6**: Costing & phasing of delivery programmes that consider:
 - Requirement to prioritise delivery programmes in time-limited phases.
 - Designation of area-based energy efficiency and heat decarbonisation delivery programmes using zoning powers if needed.
 - o Designation of other energy efficiency and heat decarbonisation.
- 71. Respondents were asked:

Q1 Do you agree with our proposed overall approach to LHEES?

72. As shown in the following table, **most of those who answered this question agreed with the proposed approach** (45). Eleven disagreed,
while seven did not specify their agreement or disagreement but made other comments.

	Yes	No	Other comment	No reply
Business & Industry (16)	10	5	-	1
Network, Professional or Trade body (14)	9	1	3	1
Local government (20)	17	1	2	-
Third sector & Community (9)	7	1	-	1
Public sector (5)	3	-	1	1
Academic (3)	1	1	1	-
Other organisation (1)	-	1	-	-
Total organisations (68)	47	10	7	4
Individuals (3)	2	1	-	-
Total (71)	49	11	7	4

- 73. Sixty-six respondents provided additional comments in support of their view. These views are summarised in the following paragraphs.
- 74. The 45 respondents who agreed that local authorities should have a duty to produce and implement a Local Heat & Energy Efficiency Strategy (LHEES) all provided supporting comments. In addition, three of those who did not select a tick box answer but did supply comments said that they agreed in principle with some or all of the proposed approach.
- 75. Several of those who agreed simply made general positive comments welcoming the proposed approach while others gave very detailed and individual comments.
- 76. One of the key themes to emerge, in around a quarter of **responses, mainly** from the local government group but also from some others, related to the need for support for local authorities in terms of finances, capacity building, experience and expertise.
- 77. Respondents wanted to see more information or greater clarity as to what would be available to local authorities (LAs), including the level of support, when funding would start and how long this would last.
- 78. A small number felt that the Scottish Government (SG) should provide or arrange the training that will be needed, for example one respondent from the local government group suggested:

"There are a range of new and additional skills that are required for the execution of the LHEES and it should be considered that the SG

develop and arrange for training to all practitioners in the LAs to provide the skills and knowledge required."

- 79. Many of these respondents, along with some others, stressed the **need for local authorities to work together to share resources and skills** or welcomed "the proposal to allow local authorities to discharge jointly their duty to produce an LHEES, as a means to share knowledge and expertise across different geographic areas". (3rd sector & community)
- 80. There were one or two requests for clarification over what powers of enforcement LAs would have.
- 81. While a small number felt that there should be a standard approach to LHEES to ensure consistency, others commented on the need for local flexibility.
- 82. In addition to working with other local authorities, a small number commented on the **need to involve others such as CPPs and, in particular, the private sector**. There were also a small number of calls for clarity as to the role of the private sector in both LHEES and SEEP.
- 83. Consumers were also mentioned, with a small number of respondents commenting that **buy-in from consumers would be vital to the success of LHEES** and a suggestion that plans would need to consider any impact on consumers.
- 84. Another theme related to the **need for central development of a range of tools and support**, for example data management, spatial modelling, costing, profiling and projecting demand, engagement and other LHEES requirements. Central, rather than development by each local authority, was favoured as it would mean cost savings. There was also a suggestion that the SG could provide guidance on the preparation of a socio-economic model and a request for usable cost models to compare against LHEES proposals.
- 85. Several respondents commented on the staged approach, with most of these respondents welcoming the idea. Most commented on the 15-20 year period with many stressing the need for regular reviews or interim or milestone targets.
- 86. A small number asked for clarification as to what happens after the 15-20 year period as: "Many of the investments required to realise the strategy will have an investment life cycle longer than the life of the strategy" (business & industry). There was a suggestion that the period be extended to 25-30 years.
- 87. Several stressed the **need for LHEES targets to be aligned with national targets** while others commented on the need to be able to align LHEES targets with local targets, plans and priorities.

- 88. One respondent, from the academic group, suggested that "LHEES should broadly have a three-part structure:
 - 1. Long-range vision of energy efficiency and heat supply for each local authority area. I.e. articulation of what the strategy aims to achieve over the long-run (at least 20 years) and where.
 - 2. Transition plan, setting out what needs to happen and (broadly) when in order to fulfil the long-range vision.
 - 3. Delivery priorities, setting out the near term actions that can be taken in each area to take steps along the transition".
- 89. Other comments on targets or priorities included:
 - The need for targets for the proportion of heat to be delivered from low-carbon sources.
 - The need for targets for reducing energy demand and decarbonising heat.
 - The need to ensure all buildings comply with Building Standards as this contributes to tackling fuel poverty.
 - The need to emphasise cutting fuel poverty, providing affordable warmth and increasing energy efficiency.
 - "That district heating will not be the most appropriate route to energy efficiency or decarbonising heat supplies, particularly in areas where housing is predominantly low and medium density". (local government).
 - The need for area-specific targets.
- 90. Some other comments on the stages, each from one or two respondents, included:
 - Stage 2: the need for more information on the assessment of existing building stock's energy performance.
 - That stages 3, 4 and 5 will impact each other and so should be undertaken at the same time.
 - The need for clarification as to what 'short-term strategy period' refers to in stage 3.
 - That stage 5 would be more appropriate for target setting; as these could be set after the socio-economic assessment.
 - That a stage 7 should be added relating to the method and frequency of monitoring and reporting on LHEES; several respondents asked for clarification or detail on reporting, monitoring and measurement.
- 91. Data collection was a smaller theme mentioned by respondents, with some concern that voluntary data collection may not provide the robust data required and that this may need to be statutory.

- 92. Other, smaller, themes included:
 - The need to ensure that plans include decarbonisation of transport, electricity, energy generation and energy storage; that electricity and transport systems must be included or considered.
 - The need to involve Distribution Network Operators early in respect of electricity and heat decarbonisation.
- 93. The 11 respondents who disagreed that local authorities should have a duty to produce and implement a Local Heat & Energy Efficiency Strategy (LHEES) did so for a variety of reasons. The main concern related to a lack of resources available within local authorities to deliver LHEES.

94. Others included:

- That new developments should be excluded as these already focus on improving energy-efficiency and reducing carbon emissions.
- The need to place a duty on other public sector organisations such as SEPA.
- That the proposals have been made without undertaking resource impact assessments and gap analyses.
- Concerns over flaws in SEEP (particularly relating to fuel poverty) and therefore linking LHEES with SEEP.
- That tackling fuel poverty should be the priority.
- That the focus should be on reducing energy demand.
- That the 15-20 year time frame is too short.
- The need for a national strategy to decarbonise heat.
- 95. Comments from the seven respondents who replied without giving a yes/no answer (although three said they agree 'in principle') again included concerns over the resources available to local authorities, as well as concern over funding as a whole.

96. Other comments included:

- The need for a clearer evidence base (for example on low carbon heating supply technologies or the cost and benefits of local energy systems) before any plans and strategies are developed.
- The need to prioritise energy efficiency and demand reduction measures.
- The need for guidance as to how LHEES "will be developed and implemented at a local level given that the majority of the existing policy framework within local authorities do not extend beyond 3-5 year cycles" (local government).
- Concern over the ability to collect relevant data.

- Concern over how to achieve buy-in from developers and others in the private sector, and home owners.
- The need to consider the historic environment.

Statutory Duty to Report on Tackling Fuel Poverty and Climate Change

- 97. The consultation paper stated that there is a statutory duty for local authorities to report on tackling fuel poverty and climate change. The duty to report is postulated to align closely with local authorities' plans for improving the energy efficiency of buildings and decarbonising the heat supply, and therefore it is proposed that this duty should be moved from the Local Housing Strategy (LHS) to the LHEES.
- 98. Question 2 asked:

Q2 What are your views on asking local authorities to report on tackling fuel poverty and climate change in the LHEES rather than the LHS?

- 99. Fifty-three respondents provided comments in response to this question, and a significant minority were broadly supportive of reporting about climate change and, to a lesser extent, fuel poverty, in the LHES rather than the LHS.
- 100. Several of these respondents simply stated that the LHEES seemed the logical or sensible place for these reports given LHEES's remit as stated in the consultation. Other reasons cited by respondents included:
 - Aligning the duty to report with the strategy that is focused on delivering the energy efficiency, fuel poverty and decarbonisation objectives.
 - The strong links between energy efficiency, carbon reductions and fuel poverty.
 - The likelihood of giving fuel poverty a greater focus and a more joined up approach to tackling the issue.
 - Ensuring that local authorities consider emissions from all the buildings in their areas.
 - The LHEES would provide a central point to collate and monitor on elements that go beyond the scope of the LHS.
- 101. A small number of respondents favoured retaining reporting in the LHS. Smaller numbers were unsure and very small numbers thought reporting should not be done through either channel or should be carried out as a standalone document instead. Alternative suggestions for reporting structures were made as follows:
 - Via local authorities directly.

- Leaving Councils and community planning partners to work out where they set out and report on their climate change and fuel poverty strategies.
- Through the Fuel Poverty Advisory panel.
- 102. A few respondents, particularly those in local government, were adamant that at least some elements of fuel poverty reporting needed to be in the LHS, though most of these were happy for climate change to be reported within the LHEES. Reasons for this mainly centred around the lack of correlation between climate change and fuel poverty, or between energy efficiency and fuel poverty. As one local government respondent put it:

"Fuel poverty ... is not the consequence of a lack of investment on energy efficiency improvements. The main reason for fuel poverty increasing.. is low income levels and the year on year increases to fuel prices."

- 103. However, very small numbers of respondents thought the opposite: climate change reporting should be retained in the LHS, and fuel poverty reporting moved within the LHEES.
- 104. A significant number of respondents commented on the need for reporting to be tied in or have a joined-up approach with other mandates or plans in order to be effective. For instance, according to an academic respondent:

"There are a range of developments across Scottish heat policy with which LHEES should be coordinated. These include minimum energy performance standards for existing buildings (currently being developed for the private rented sector) and the new fuel poverty strategy."

- 105. Examples of other mandates, plans and bodies which needed to be taken account of, informed or coordinated with when reporting on fuel poverty and climate change were given as follows:
 - The National Fuel Poverty Strategy.
 - Local Outcome Improvement Plans (LOIPs).
 - Warm Homes Bill.
 - Climate Change Public Bodies Duties Reporting (several respondents).
 - The Scottish Government and its duties around monitoring, evaluation and reporting of fuel poverty.
- 106. Particularly among local government and business & industry, concerns were raised about the lack of resources available, or the extra resources, funding and support needed, in order to carry out the LHEES reporting requirements. Very small numbers of respondents were also

concerned about the additional reporting responsibilities imposed upon local authority planning and building control departments.

District Heating Zones

- 107. Within the consultation document, the Scottish Government proposed that LHEES would designate zones for energy efficiency and heat decarbonisation. These zones would help to phase the operation of areabased SEEP delivery programmes for energy efficiency. The zones would also set out the most appropriate heat decarbonisation options for specific areas.
- 108. The Scottish Government are proposing that zones would be indicative. This would not prevent other forms of heating from being used in those zones through legislative means, but would instead help local authorities to communicate their strategic approach to energy efficiency and heat decarbonisation through SEEP. In particular, zoning will signal to investors both where energy efficiency delivery programmes under SEEP will take place, and the most appropriate areas for future development of district heating, and if appropriate, communal heating. Question 3 asked:

Q3 Do you agree with our proposed overall approach to zoning?

109. As shown in the following table, there was majority support, across all sub-groups, for the proposed approach to zoning. Smaller numbers (around one in six) respondents disagreed with the approach, with around one in four not answering this part of the question.

Question 3 Yes No Other No reply comment 8 3 5 Business & Industry (16) 3 Network, Professional or Trade body (14) 3 8 3 Local government (20) 15 2 Third sector & Community (9) 6 1 2 3 2 Public sector (5) Academic (3) 2 1 1 Other organisation (1) Total organisations (68) 38 11 19 Individuals (3) 2 1 **Total (71)** 40 12 19

- 110. Fifty-eight respondents provided additional commentary in support of this question. Within the broad support for the zoning approach, however, there was little consensus; a wide variety of discussion points were raised by respondents. Small numbers of respondents stated general favourable impacts of zoning such as their help in focusing resources, and their usefulness for identifying priority areas. A few respondents were positive about zoning being indicative rather than mandatory (though a very small number queried whether indicative-only zones would have value in terms of getting energy efficient schemes running), while a few others supported the non-geographical approach to zoning.
- 111. A significant minority of respondents chose to focus on what they thought was needed to help the push for adoption of programmes for energy efficiency. In particular, some respondees pinpointed commercial attractiveness and conditions for investment as being crucial to getting take up and funding for energy efficient schemes, with most of these respondents expressing doubt about whether the zones will provide sufficient certainty to enable providers to commit to investment. Other small numbers of respondents saw community engagement (in particular householders and owners of property) as being essential to support take up of the schemes. Similar numbers saw affordability and price (e.g. cheaper existing gas connections) as being a stumbling block to community take up.
- 112. Significant numbers of respondents pointed out that in order for zoning to work effectively, collaborative working between a variety of stakeholders would be essential to avoid conflicts, often at a regional or national level. Examples of necessary joint working and potential conflicts were given including:
 - Formal cooperation between local authorities during the zoning process (or where a zone crosses local authority boundaries).
 - Investment decisions in upgrading buildings not being aligned with planning of district heating.
 - Clarity required as to how the zoning process for LHEES's would be reflected in Local Development Plans (LDPs) / how LDPs should be aligned with LHEES's.
 - The current review of the planning system provides an opportunity to ensure as much linkage as possible between the LHEES and planning processes.
 - Local authorities need to be supported in the overall approach to zoning at a national level in engaging with potential operators of zone consents.
- 113. A few respondents saw a need for more or improved data and analysis requirements as necessary in order to make zoning effective. Types of accurate data mentioned included demography, geography, ground conditions, fuel poverty levels, socio-economic analyses, and analysis to identify key heat anchor loads (to connect onto the network). Smaller

- numbers of respondents detailed technical issues related to heat networks and heat mapping.
- 114. A minority of respondents made specific comments about district heating. These included more needing to be done to make funding of district heating affordable, the lack of enforcement in place to persuade building owners to connect to it, and economies of scale being necessary to ensure carbon savings from the network technology. Mentions were also made of the possibility of the revised National Planning Framework (NPF) having an important role in identifying where large-scale district heating might be deliverable, and an opportunity to establish pipeline corridors where there is the potential for connection to low or zero carbon energy sources that exist outside urban areas (in addition to establishing zones in urban high load density areas).
- 115. A few respondents were of the opinion that there should be a requirement to consider a variety of low carbon technology options regarding heating and efficiency measures as part of the zoning process, as opposed to prioritising the development of local heat solutions and heat networks. A small number of respondents also suggested identifying zones in such a way as to prohibit use of conventional fossil fuelled heating systems.
- 116. Small numbers of respondents made points about rural and semi-rural energy efficiency conditions being very different to those for urban areas. Most of these respondents opined that rural and remote areas may be at a disadvantage for zoning and therefore funding and investment relative to urban areas, as they are unlikely to be viable for heat network development.
- 117. Other points, each raised by small numbers of respondents, included the following:
 - Concerns about the exclusion of other opportunities caused by zoning, or alternatively the need for exempted areas from the zoning policy (e.g. new developments, developments with low energy demands, developments which already provide heat via decentralised low carbon means).
 - Possible clashes in terms of the choices between district heating and low carbon solutions, or low carbon vs energy efficiency generally.
 - The need to learn from other countries' experiences (Denmark, Netherlands, England), with the proviso that replication may be difficult due to local factors (e.g. higher rates of public ownership in Denmark than in Scotland).
 - The requirement to retrofit older buildings to a high standard to accommodate heating and energy efficiency improvements.
 - The possibility of using publicly owned buildings (e.g. local government buildings) as an initial 'hook' for developing district heating schemes.

District Heating Consenting

- 118. The consultation paper noted that the Scottish Government wants to support local authorities to ensure district heating develops in a strategic manner in their area through the proposal for statutory LHEES. The SG also proposes to introduce a new district heating consent system, which would be managed and enforced by the local authority; this system would be subject to a similar consenting regime as that for other energy utilities although it would have different requirements and thresholds.
- 119. The Scottish Ministers would develop national guidance for applicants seeking district heating consent and for local authorities who would be responsible for assessing applications and issuing consents. In a situation where district heating consent has been awarded, but the district heating developer is not able to complete construction of the development as specified in the conditions of consent, the SG is seeking views on the appropriateness of any potential options for a relevant body to act as the 'developer of last resort' to ensure completion of development.
- 120. Question 4a asked:

Q4a What are your views on the proposed district heating consent process? In particular, what are your views on the appropriateness of any potential options for a relevant body to act as 'the developer of last resort' to ensure completion of development?

- 121. Overall, 52 respondents opted to provide commentary in response to this question.
- 122. A majority of respondents noted their approval of the proposed district heating consent process or specific elements of what was being proposed. Local authorities in particular were supportive of the development of national guidance and support and noted that this would offer consistency across Scotland. There was no outright disagreement with the proposed district heating consent process or specific elements of what was being proposed, although some respondents noted caveats or concerns that would need to be addressed. These included the resources needed to implement the proposed district heating consent process.
- 123. In terms of who the developer of last resort (DoLR) should be, the preference from a majority of respondents who commented at this question, was for a national body to be the DoLR. A number of local authorities felt that they should not take on the role of DoLR; furthermore, a number of respondents noted that local authorities do not have the resources to be able to take on this role. There were also a small number of cautionary comments including the need for the DoLR to be adequately resourced, that there may be procurement issues and the need to protect the investment that industrial suppliers of heat may have made.

- 124. Suggestions as to which organisations could adopt this role included:
 - A Scottish Energy Company.
 - A publicly owned national provider.
 - An independent body appointed by Scottish Ministers.
 - The Scottish Government.
 - A similar model to that adopted by Warmer Homes Scotland.
 - An existing regulatory body.
 - A not-for-profit local energy company.
- 125. A significant minority of respondents noted that local authorities do not have the necessary resources to be able to manage the consents process (noted primarily by those in the business & industry and trade body sectors). Allied to this point, a number of local authorities noted that they need support through the development of national guidance and support or that they need robust systems, staffing levels and the skills to oversee the consents process. There were some suggestions that a central body could issue and manage consents or that there is a need to pool experience and expertise on a national basis and target effectively support where it is needed by local authorities.
- 126. There were also some suggestions that the consent process should be subject to the normal planning consent process although there were a small number of comments that this should be separate from the planning process.
- 127. A small number of respondents, mostly from within local government, suggested a requirement for a development bond as part of the consenting process; or having a bond at the consenting stage to address the financial implications of another party completing the development, so the default position does not fall to the taxpayer.
- 128. There were also a small number of calls for a robust system for monitoring schemes and reference to the need for accountability and transparency from district heating operators.
- 129. Other comments made by very small numbers of respondents included:
 - The need to consider the most suitable heating option and the potential to offer a range of approaches for delivery of low carbon options in conjunction with energy efficiency measures.
 - The need to introduce performance standards through license conditions to help ensure there are clear and consistent rules within the sector.
 - Developers should not be allowed to cherry-pick the most commercially advantageous developments; this could inhibit progress towards a reduction in fuel poverty.

- There needs to be sufficient evidence available to a network operator
 within a predefined zone to encourage investment in delivery of the
 network and the assets that will be owned, operated and maintained by
 them. Additionally, that any intervention stemming from the development
 of a LHEES is justified and supported by robust evidence (cited by those
 within business & industry and network, professional and trade body).
- A need to refer to research that has been or is currently being undertaken; for example, by the Heat Delivery Network Unit.
- 130. A small number of respondents requested clarity or further detail on some aspects of what was being proposed. This included:
 - The requirements that would be set out by Scottish Ministers, for example, on timescales or what evidence would be required on customer engagement in instances where there are no direct customers.
 - The circumstances and conditions in which a DoLR would be appointed.
 - Information on how customer engagement could be demonstrated and how this would link with the socio-economic assessment process.
 - How district heating consents would require progress towards renewable and climate change targets.

Question 4b then went on to ask:

Q4b What are your views on the proposed district heating consent process? In particular, what are your views on options for ensuring that district heating operators have similar or the same rights as other statutory undertakers for permitted development and wayleaves?

- 131. Forty-six respondents provided comments in relation to this.
- 132. Most of these respondents noted their agreement with the proposals laid out in the consultation paper. Once again, there were some references to the need for local authorities to have sufficient expertise and resourcing to be able to undertake this role. Once again, there were a small number of requests for further detail such as what compensation would be available for the use of land and for other wider issues in relation to property rights.
- 133. A small number of respondents in the business & industry sector and network, professional and trade bodies commented that heat networks should be treated in a similar manner to other utilities and benefit from reduced business rates and other taxation breaks.
- 134. A very small number of respondents in local government and the 3rd sector / community commented on the need for a strategy-driven approach rather than a speculative approach, with the organisation in the third sector / community feeling that a speculative approach has not served the onshore wind industry well.

Socio-Economic Assessment

135. The consultation paper set out a proposal for socio-economic assessment to be a statutory requirement at three levels: of LHEES (strategy level), of district heating developments (project level) and for use during mediation for connecting individual buildings (building level). The Scottish Government would provide statutory guidance for socio-economic assessment in the form of a detailed methodology, laying out the overarching process and standard assumptions.

Q5 What are your views on the proposals for socio-economic assessment?

- 136. Overall, there was broad agreement from a majority of respondents, across all respondent sub-groups, for socio-economic assessment to be included as part of LHEES, with some of these respondents noting that this would help to bring about health benefits such as improved air quality or reduced emissions as well as social benefits such as targeted action to reduce fuel poverty.
- 137. There were also a small number of references to the need for a whole systems approach that aligns with the Scottish Government's overall objective of reducing fuel poverty as well as aligning with other policy areas including climate change. There were also a small number of references to the need for LHEES to align with Scotland's Energy Efficiency Programme (SEEP). As noted by a network, professional or trade body;

"Socio-economic assessments should be robust. As such we suggest that factors such as social benefits, emissions reduction, health benefits, air quality improvements and other externalities that may not already be factored into some assessments are considered when developing the methodology. A whole system approach is needed to help ensure any investments made will not be subsequently detrimental to other policy areas or to achieving targets."

- 138. That said, a small number of respondents in the business & industry sector and within network, professional and trade organisations noted that consideration should also be given to market demand and the commercial viability of each proposal so as not impact negatively on local development plans. These respondents also suggested the Scottish Government should conduct an additional assessment prior to the ones already identified in order to scope and identify suitable areas of consideration for LHEES and exemptions to the policy, prior to placing a duty on a local authority.
- 139. A significant minority of respondents, across all respondent subgroups, welcomed the commitment to provide statutory guidance for socio-economic assessment in the form of a detailed methodology, laying out an overarching process and providing standard assumptions. Key benefits to this were that it would ensure consistency within and between local authority regions and that it would allow for consistent application

across all stakeholders. A few of these respondents also noted that local authority staff will need training and support to ensure they have adequate capacity because of the additional requirements placed upon local authorities to assess the assessments as part of the zoning and consent process. There was also reference from a small number of respondents to take note of the current pilots that are underway.

140. There were a few comments from respondents in the 3rd sector / community, local government and business & industry on the actual process of socioeconomic assessment, with respondents noting that the process needs to be accessible, consistent, comprehensible and transparent, and that is should not be too onerous or time consuming. For example, one local authority noted;

"From a local authority perspective it is hoped this process will be simple and not too data heavy to allow it to be readily applied and interpreted. The pilot LHEES studies taking place across Scotland will be looking at the suitability of existing socioeconomic processes and the learning from these pilots should inform the final decision on the most appropriate method to use."

- 141. A small number of respondents noted the need for update and review to take place, with suggestions that the effectiveness of socio-economic assessment should be tested every 2-5 years. This would also help to ensure that best practice is developed as skills develop.
- 142. There were calls from a few respondents for **more detail or clarification of specific issues**. These included the scope of social elements of the proposed assessment and how a common basis for measurement of these can be applied across all projects, what opportunities there will be for local communities to be involved in the process of a strategy level socio-economic assessment or in contributing to decision making about zoning and consents for district heating systems, or how this would operate as part of a competitive tendering process.
- 143. Other issues raised by very small numbers of respondents included:
 - A need for a duty on public buildings to connect to a heat network if the socio-economic assessment is positive at a local authority and project level.
 - A need to consider the cost of utilities from main suppliers.
 - A need for long term costs and benefits to be embedded in a whole systems perspective to account for interactions with changing electrical systems and competing demand for energy resources.
 - A need to ensure that fuel and technologies used in heat networks are low carbon.
 - Determination of need should also be based on energy performance of buildings.

- There is still a need to bring about reductions in energy and heat demand.
- It could be challenging to access relevant and accurate data, that some data may be subject to commercial confidentiality or that there will need to be co-operation across the sectors in sharing data.

Data for Local Heat & Energy Efficiency Strategies

- 144. The consultation paper noted in terms of heat demand, that local authorities already have access to some data on energy use and factors that influence heat demand through existing sources such as Scotland's Heat Map and the Energy Performance Certificate (EPC) register. The consultation proposed that where possible, these data sources should be supplemented with data on gas and electricity consumption, with improved accuracy so that local authorities can develop LHEES. There was recognition that this data would have to be subject to strict data sharing agreements.
- 145. In relation to surplus heat, the consultation paper laid out a proposal to continue to encourage industry with surplus heat to provide data about potential off-site heat provision on a voluntary basis to local authorities for the development of LHEES. The paper asked for suggestions as to how data on surplus industrial heat could be made available to develop LHEES or as a detailed district heating project. There was recognition that one of the major barriers to industry providing data is its commercial sensitivity and the SG was keen to better understand how these could be overcome.
- 146. Question 6 asked:

Q6 What are your views on the proposals for data for LHEES?

- 147. Overall, 54 respondents opted to provide commentary on this question. A small number of respondents noted their support for the proposals outlined in the consultation paper and commented that local authorities need a comprehensive picture of heat demand and surplus heat. Some respondents echoed points made in the consultation paper; for example, that current data sources such as Scotland's Heat Map are not suitably robust, that data related to energy efficiency measures are not accurately reflected in EPC data or that there are risks around commercial confidentiality and the use of energy data.
- 148. While a small number of respondents were supportive of data on surplus heat being provided on a voluntary basis to local authorities, a similar proportion noted that voluntary measures are unlikely to obtain the required data for the development of LHEES and, at best, may result in the provision of patchy information, which will serve to undermine the accuracy of LHEES.
- 149. In terms of accessing data, a number of suggestions were made, each by small numbers of respondents. The key suggestion, from local government and 3rd sector / community respondents, was for a requirement for industry to

provide energy consumption data on a mandatory basis. Conversely, a small number of respondents in the network, professional or trade body sub-group noted that industry should not be mandated as it is commercially sensitive information. That said, a small number of respondents also noted that European research has shown that large industrial heat users can collaborate with local plans for low carbon district heating or that collaboration and identifying synergies between stakeholders is the best way to progress and overcome commercial sensitivity barriers. Other suggestions included:

- Smart meters could be used to obtain data, although a similar proportion noted that this data would be limited as it does not record energy generation from low and zero carbon generation technologies (LZCGT).
- Education of, and engagement with, domestic and non-domestic users to encourage them to allow access to energy data; this would allow for community and business buy-in to the provision of data.
- Utilising a wide range of data sets including those already available.
 Those mentioned by respondents included the House Condition Survey,
 data from the Department of Business, Energy and Industrial Strategy
 (BEIS), data held by the Scottish Environment Protection Agency (SEPA),
 as well as historic data on consumption and modelled data consumption.
 A small number of respondents felt that if data was anonymised, this
 should help overcome issues in relation to data protection. A very small
 number of respondents in the business & industry sector or network,
 professional or trade bodies noted that there is a need to consider the
 benefits and limitations of different data sources and to highlight these
 when they are used.
- The provision of granular data, ideally at 1 minute intervals or at least half hourly.
- Data sharing agreements that offer all partners confidence in the process and consistency across Scotland would serve to remove concerns over the provision of commercially sensitive data.
- A national agency to collate data and support local authorities, or for the development of a commercial customer comparator tool to help customers understand the case for investment, or the provision of data logging equipment to existing key loads.
- 150. A few respondents highlighted **drawbacks to the datasets**, with respondents in the business & industry sector or network, professional or trade bodies commenting that a key concern for the housebuilding sector is that the proposed data sets will largely reflect existing buildings which have poor energy efficiencies and higher carbon emissions when compared to new buildings which have lower energy demand.
- 151. A small number of respondents, mostly in the business & industry sub-group requested that the collection of data should not be burdensome.

Further Call for Evidence on industry heat data

152. Question 7 then went on to ask:

Q7 What types of data information would industry be willing to provide a local authority or national delivery mechanism to develop LHEES, so that they can identify opportunities (potentially in aggregate) for heat demand reduction and heat recovery, both on and off site?

- 153. Twenty-seven respondents, across all sub-groups, opted to provide further commentary.
- 154. Rather than cite what types of data information industry might be willing to provide to a local authority or national delivery mechanism to develop LHEES, some respondents referred to related issues. A small number of respondents noted that SEPA should play a role in obtaining and / or the provision of data and that they already can provide some data.
- 155. There were a small number of references as to what potential might be available for partnership working or joint ventures in the development of LHEES, although a similar proportion of respondents also noted that data protection may be an issue or that data protection needs to be put in place so that any data published will be anonymised by individual or development. Issues relating to data protection were raised by organisations in the business & industry sector, network, professional and trade bodies and an organisation in the local government sector. There were also a very small number of comments on the need for local authorities to provide reassurances that any data provided will not be shared with other organisations or be subject to Freedom of Information requests. An organisation in the 'other' category noted that initiatives under way in European countries have gathered significant data on best practice approaches, and demonstrated willingness for collaboration and the sharing of data.
- 156. The commercial sensitivity of data was also raised by a small number of respondents, with an organisation in the academic sector noting that:
 - "some potential partners will be deterred if the data management plans and contractual agreements underpinning LHEES projects are not sufficiently stringent to assuage concerns over commercially sensitive data being used for competitive advantage by LHEES evaluators outside LAs and the Scottish Government".
- 157. One network, professional or trade body organisation noted that their data is too commercially sensitive to share. Another noted that some energy suppliers and building owners are unable to share some data because of issues in relation to data protection and commercial sensitivity.

- 158. A few respondents in the business & industry sector or network, professional and trade bodies group commented that local authorities already have access to a significant amount of data in relation to new build housing including Standard Assessment Procedure (SAP) conditions and EPC data.
- 159. Some respondents cited specific types of information that might be provided and these included:
 - Current heat outputs and anticipated future changes to output.
 - Likely usage data / consumption levels.
 - EPC data.
 - Quantity, temperature, type of heat.
 - Availability of heat over a specified time period.
 - Generation data.
 - Energy sources used for production.
- 160. There was a suggestion from a third sector / community organisation that heat should be added to annual returns on gas and electricity for larger organisations similar to the reporting under the Carbon Reduction Commitment Energy Efficiency Scheme.¹
- 161. An organisation in the business & industry sector noted that district heating developments will be most prevalent in inner cities and towns where the majority of potential connections would be domestic, public buildings or commercial spaces, so that the level of industrial enterprise to connect to district heating networks will be limited. Additionally, that industry will have tried all possible measures not to have waste heat to contain costs, so that any end product is likely to be low temperature in the form of heat to atmosphere or wastewater.
- 162. A number of themes echoed those seen at question 6. These included:
 - The need for the Scottish Government to mandate organisations to provide information.
 - A need for the Scottish Government or local authorities to engage directly with industry, professional associations and legal professions, and to set out the benefits of providing data.
 - That the roll out of smart metering will improve the accuracy of available data on energy consumption.

¹ Note, the UKG announced its decision to close the CRC from April 2019 and consulted on introducing new Streamlined Energy and Carbon Reporting in November 2017: https://www.gov.uk/government/consultations/streamlined-energy-and-carbon-reporting

163. Question 8 then asked:

Q8 What data from industry would be most helpful in developing district heating projects?

- 164. Thirty-seven respondents opted to provide commentary.
- 165. Most suggestions came from local government or business & industry organisations.
- 166. The key data considered to be most helpful in developing district heating projects was:
 - Consumption data including duration times (1/2 hourly, daily, seasonal), volume and temperature.
 - Cost data.
 - Data on waste temperatures, waste volume.
 - Amount of available heat.
 - Data on surplus heat output.
 - Operations information and details of processes that result in waste heat.
 - Locations of potential ground source heating (Scottish Heat Map), with a suggestion that this should be updated to show developers, owners, capacity and type of scheme).
 - Data covering building characteristics, to include physical characteristics and demand profiles.
 - Length of time commitment can be made and likely downtimes.
 - Security of supply requirements.
 - Smart meter data.
 - Likely variations in data provided or plans for changes.
 - EPC data, although there were some acknowledgements that this is limited in nature. There were also a very small number of requests for this to be freely available as it is in England (organisations within business & industry or network, professional and trade bodies).
- 167. A small number of organisations in the business & industry or network, professional and trade body sub-groups requested access to research carried out by the Scottish Government. This included the Regulation of Energy Efficiency in Private Sector Houses (REEPs) in energy profiles of existing building stock, the Scottish Household Survey, feasibility studies that have been conducted and data on schemes which have failed or been successful.

168. Question 9 then asked:

Q9 What data could be provided without compromising competitiveness of these organisations?

- 169. Overall, 32 respondents opted to provide a response to this question; some of whom reiterated points made at the previous question. Around a quarter of these respondents focused on the data that could be provided without compromising the effectiveness of organisations; this data included:
 - Waste heat recovery / generation, to help identify potential clusters of surplus heat.
 - Energy / consumption data, with one respondent requesting this at an aggregate monthly level with daily, weekly and seasonal profiles, although they also suggested cost data should remain voluntary.
 - Utility bill data.
 - · EPC data.
- 170. A small number of organisations in the network, professional and trade body sector and within business & industry noted that data is already within the public domain.
- 171. A key theme emerging, albeit from a minority of respondents, mostly within the local government sector, was of the need to encourage organisations to engage. Methods suggested included the need to build strong relationships with industry, to set up collaborative approaches or emphasising the benefits to businesses such as the potential for additional revenue generation or opportunities to improve financial value that will add to business efficiencies.
- 172. Another key theme, again coming primarily from local government organisations, was of the need to provide reassurances to businesses that any information provided will be treated as confidential; or to ensure there are confidential data sharing agreements that will restrict use of data for specific purposes.
- 173. Other issues raised by a few respondents included a potential role for central management so that data could be provided to a third party potentially the government or SEPA to protect the confidentiality of the data. An organisation in the business & industry sector also suggested that some data is already held by trade organisations who administer the climate change agreement on behalf of their members.
- 174. A small number of organisations commented on how data could be provided, with one suggestion that information could be provided on ranges of data rather than specific data; another that data would need to be provided in a consistent manner, using unique meter references so that this is open and transparent. A respondent in the network, professional and trade body sector

- commented that some data could not be provided because a low number of schemes will mean that any data provided could be compromising.
- 175. There was also reference from a small number of respondents of the need for statutory regulation to ensure data is provided. A similar number of respondents in the 3rd sector / community and academic sector commented that the provision of surplus heat data is not likely to compromise the competitiveness of organisations.

Summary of Findings: Local Heat & Energy Efficiency Strategies

Most of those who replied agreed with the proposed approach to place a statutory duty upon local authorities to work with relevant stakeholders to produce Local Heat & Energy Efficiency Strategies (LHEES).

There were requests for more information on the resources and support that will be made available to local authorities.

Respondents commented on the need for more interim targets or milestones to be set within the 15-20 year period.

There were calls for clarity as to how LHEES will be reported, monitored and measured and suggestions that each LHEES will need regular reviewing or updating.

A significant number of respondents noted the need for reporting to have a joinedup approach with other developments across Scottish heat policy. A key concern was that of resources, funding and support that will be needed to carry out the LHEES reporting requirements.

There was majority support across all respondent sub-groups for the proposed overall approach to zoning. There were some concerns as to whether the zones will provide sufficient certainty to enable providers to commit to investment.

Community engagement was perceived to be a factor that would help with take-up and, alongside this, respondents referred to the need for district heating to be affordable to consumers.

A majority of those answering the question noted their approval of the proposed district heating consent process or specific elements of what was being proposed.

In relation to the developer of last resort, the preference from a majority of respondents was for a national body to adopt this role; primarily due to a lack of resources for local authorities to be able to take on this role. That said, there were also comments that the developer of last resort would need to be adequately resourced.

In terms of the consents process specifically, there were some comments that local authorities do not have the necessary resources to be able to manage this, alongside suggestions for a central body that would issue and manage consents.

Most of those answering agreed that district heating operators should have similar or the same rights as other statutory undertakers for permitted development and wayleaves.

There was broad agreement for socio-economic assessment to be included as part of LHEES.

A significant minority of respondents welcomed the commitment to provide statutory guidance for socio-economic assessment in the form of a detailed methodology, laying out an overarching process and providing standard assumptions.

Reference was made to the need for the process for socio-economic assessment to be accessible, consistent, comprehensible, and transparent.

A small number of respondents noted their support for proposals for data for LHEES, with comments that local authorities need a comprehensive picture of heat demand and surplus heat.

Views were mixed as to whether data on surplus heat should be provided on a voluntary basis, with some noting that voluntary measures are unlikely to obtain the required data for the development of LHEES.

Only small numbers of respondents referred to types of data information that industry might be willing to provide, instead referring to data protection requirements, the need to anonymise data or the commercial sensitivity of data.

The need to engage directly with industry and professional associations was cited by some respondents; along with the need to offer reassurances that data will be treated as confidential or suggestions that confidential data sharing agreements should be used to allay industry concerns.

A few respondents suggested the Scottish Government would need to mandate organisations to provide the required data.

Only a small number of respondents cited any data that could be provided without compromising the effectiveness of organisations.

District Heating Licensing

Licensing for District and Communal Heating

176. The consultation paper noted that in order to be able to develop and / or operate a district heating scheme, it is proposed that a developer / operator must have a licence. This licence would have to be obtained before development or operation of a district heating network. Licences would be issued and monitored nationally, in line with regulatory provisions which would be set out by Scottish Ministers. Licences would be issued by a national body with conditions to ensure the licence holder meets their commitments. Contingency measures would also be put in place to ensure that market stability and customers' heating supply was maintained in the event of a district heating supplier or developer failing to meet licence conditions or becoming insolvent.

177. Question 10 asked:

Q10 What are your views on our proposed approach to district heating licencing?

- 178. Overall, 53 respondents across all sub-groups, opted to provide a response to this question, with a majority noting their support for the overall approach to district heating, licensing and connection, or for specific elements of the proposed approach such as agreement of the need for a new national body to issue licences or for the use of the CIBSE Code of Practice. Some respondents noted that a licencing system will allow for consumer protection and consistent standards around service levels, service contracts, continuity of supply and so on. A small number of respondents referred to the need for a licensing system given that district heating operators effectively operate a supply monopoly.
- 179. Small numbers of respondents qualified their response or noted additional issues to be considered. A few respondents within the public sector, local government, academic, business & industry and 3rd sector / community sectors noted the need for independent scrutiny, monitoring and evaluation to take place, with reviews after specific time periods to ensure that district heating networks are meeting their aims. There were also a small number of requests for the Scottish Government to provide guidance.
- 180. There were references to the need for the licensing system not to be overly burdensome or bureaucratic and structured so that competition and innovation are encouraged, with a balance struck between the obligations placed upon developers or operators and the rights to facilitate developments. Allied to this, the issue of encouraging investment by operators so that they deliver solutions that offer direct benefits to end users was cited by a small number of respondents.

- 181. There were a few suggestions that certain sizes or classes of development could be exempt from licensing or that there may need to be different licencing conditions to suit different scales of development (the latter cited primarily by local government organisations) so as to encourage SMEs to become involved as well as encouraging greater levels of investment in the district heating market.
- 182. Concerns over the challenge of enforcement were raised by a few respondents in the network, professional or trade body and business & industry sub-groups.
- 183. There was a suggestion from a small number of respondents that licencing requirements should build upon the content of the Heat Trust or that awarding a licence should be dependent upon registration with the Heat Trust and the ADE's forthcoming compliance scheme, particularly as this would ensure regulatory alignment over the UK.
- 184. Other concerns raised by very small numbers of respondents included:
 - What is proposed does not address the issue of demand risk. As noted by a respondent within the business & industry sector "The licensing approach does seem to be one way and not necessarily de-risking the market for potential entrants in any way. Demand risk is not addressed by this licensing approach for example."
 - A licensing regime could introduce increased burdens on developers
 without offering them clear commercial benefits. As noted by one
 business & industry respondent, "We believe that any approach to district
 licensing should take into consideration the likely cost and administrative
 burden of licencing on prospective district heating operators. We therefore
 advocate for a "licence lite" approach".
 - There is a need for fair pricing and the tracking of gas and electricity prices to ensure that customers get best value from their district heating network.
 - There may eventually be a need for separate licences for generation, supply and networks.
 - A need to ensure adequate consumer protection is in place.

Consumer Protection

185. As heat networks are effectively operated by monopoly providers, the Scottish Government (SG) recognises the need for consumer protection standards. However, consumer protection is not a devolved area for the Scottish Government. What is being proposed is that the Scottish Government will set out in guidance the existing, UK-wide consumer protection framework which already applies to district heating, while pressing for further devolution of consumer protection. The SG continues to work with the Association of Decentralised Energy (ADE) on the development and implementation of voluntary schemes and standards.

186. Question 11a asked:

Q11a Taking into account the limitations of the Scottish Government's legislative competence in relation to consumer protection, what are your views on our proposals around consumer protection?

- 187. A total of 50 respondents, across all sub-groups, opted to provide commentary to this question. A significant minority of these respondents noted their support for what is being proposed in relation to consumer protection, with comments such as consumer protection is paramount to ensure price security, high service standards and long term societal support or that it is important to have consumer protection given that consumers will not be able to switch supplier or that they may be obliged to connect. A small number of respondents within the local government sub-group noted their support for efforts to strengthen consumer protection although they noted this will need to be strong and enforceable.
- 188. A number of respondents, primarily those in local government organisations suggested that consumer protection could be built into the consent and procurement processes; i.e. that there would be a requirement for a district heating operator to be a member of the Heat Trust or an equivalent body. Furthermore, that the content of the licence should build upon the content of the Heat Trust. There were a very small number of references to the need to build upon the content of the Heat Trust and create stronger consumer protection.
- 189. There were also a number of references to the need for mandatory protection schemes rather than voluntary, again based on the standards developed in the Heat Trust Scheme Rules. However, a small number of respondents, primarily within the business & industry sector felt that there needs to be a balance so that protection is fair and proportionate to the developer or operator so as not to discourage development while also protecting the end user. There were also a very small number of suggestions that it should not be mandatory to join the Heat Trust or that there could be a licence exemption for small operators (cited by business & industry respondents).
- 190. Some respondents, primarily in the local government and business & industry sub-groups noted the need for ongoing dialogue with the UK Government so that Scotland and the rest of the UK adhere to the same standards and avoid regulatory divergence. A few respondents noted their support for devolution of consumer protection regulation or commented that without powers being transferred from the Westminster government, it will be difficult to control or police heat networks.
- 191. Some respondents referred to the forthcoming Competition and Markets Authority (CMA) Review into domestic heat networks and noted that this should inform arrangements for consumer protection or that these findings will need to be taken into account. A small number of respondents referred

to research undertaken by the Consumer Futures Unit of Consumer Advice Scotland (CAS) which outlined a number of protection measures for consumers that should be offered.

- 192. Other issues raised by small numbers of respondents included:
 - A need for pricing control to protect consumers, particularly as operators will be operating in a monopoly situation and thereby restricting customer choice of energy supply.
 - A request for clarity over what role the forthcoming Consumer Scotland agency would have in policing operators of district heating networks.
 - Queries as to the effectiveness of providing information to consumers via Energy Performance Certificates (EPCs).
 - Suggestions for a central agency to provide support to existing schemes so they can meet any required standards.
 - A need for robust design and construction standards.
- 193. Question 11b then went on to ask:

Q11b How do you think we could provide a robust complaint resolution process in relation to District Heating in Scotland?

- 194. Forty-one respondents across all sub-groups provided a response.
- 195. There was general support from respondents for a robust complaint resolution process in relation to district heating in Scotland; with a key theme emerging being the need for a district heating ombudsman service to include counselling and conciliation services to achieve dispute resolution.
- 196. Some respondents referred to Heat Trust as a potential body to offer dispute resolution or suggested their rules for Registered Participants could provide a useful framework for dealing with complaints, although a small number of respondents suggested that consideration should be given to using existing agencies such as CAS.
- 197. A few respondents commented that the district heating sector should use similar processes as currently exist in the gas and electricity sectors.
- 198. The process for raising complaints was cited by a few respondents, with comments that this needs to be open, easy to access and navigate, offering a single point of contact and consistent in terms of access. A small number of these respondents focused on the importance of face-to-face support given that some customers of district heating are likely to be vulnerable and will need high levels of support.
- 199. There were also some comments that **this process could be limited given that consumer protection powers are not devolved to Scotland**. A small

number of respondents noted that separate regimes in Scotland and the rest of the UK could cause confusion.

200. Question 12a went on to ask:

Q12a What are your views on how consumer advice should be provided for district heating customers in Scotland – what form should this take?

- 201. Overall, 47 respondents opted to provide a response to this question. A key theme was the need to increase awareness of district heating through information campaigns that would highlight the benefits of district heating and signpost individuals to sources of advice for further information. As some noted, awareness and understanding of district heating is low and this form of heating represents a move away from a capacity to switch suppliers, so there is a need to win 'hearts and minds'.
- 202. In terms of how information should be provided, respondents cited a range of different information channels, including:
 - Literature / pamphlets / brochures.
 - Face to face meetings / in home demonstrations.
 - Community engagement sessions / workshops.
 - Website.
 - Social media.
 - Outreach engagement such as in libraries or shopping centres.
 - Telephone helpline.
 - Customer information packs.
- 203. There were also some comments of the **need to ensure that any** information provided is easy to read and understand, jargon-free and consistent across all sources. While there was support from some respondents for online information to be provided, others noted that not all individuals will have online access or be familiar with technology.
- 204. Some respondents highlighted the types of advice that should be offered. These included advice on energy efficiency, billing systems, pricing and tariffs, future pricing structures, timescales for repairs and so on.
- 205. A number of respondents also focused on which organisations should provide advice, with many local government organisations highlighting the need for organisation(s) that are independent and impartial. Various organisations were cited and these included CAS, Home Energy Scotland (HES), Energy Savings Trust (EST) or local authority trading standards officers. There were a small number of suggestions that organisations could jointly work together in providing advice; for example, CAS could provide general advice, while EST would provide specialist advice.

- 206. A small number of respondents suggested that network operators should provide information and / or that this could be a licence condition. There were also a small number of references to landlords, estate agents and industry trade bodies such as the Association for Decentralised Energy (ADE).
- 207. Question 12b then went on to ask:

Q12b What are your views on how consumer advice should be provided for district heating customers in Scotland – who should it be aimed at?

- 208. Thirty-one respondents opted to provide commentary.
- 209. A number of respondents reiterated points made to the previous question, commenting again on the need for advice to be provided across a range of different information channels and in different formats.
- 210. A key theme was the need for advice to be able to cater for all customers; a few respondents highlighted the needs of vulnerable customers and new tenants to be considered.
- 211. As at the previous question, there were some comments on the **need for providers of advice to be independent and impartial**, with suggestions as to which organisations should be providing advice.
- 212. One respondent in the business & industry sector referred to the Bonfield Review and the creation of a single online repository for energy advice.
- 213. Question 12c then went on to ask:

Q12c What are your views on how consumer advice should be provided for district heating customers in Scotland – what should be provided?

- 214. Twenty-seven respondents opted to provide commentary; again, many chose to reiterate points raised in response to Questions 12a and 12b.
 - 215. In terms of what should be provided, respondents referred to specific advice on tariffs, prices, costs, billing and standards for billing, repairs, customer standards, customer complaints and resolution, as well as more general information on district heating per se and the benefits of this as a form of heating. Again, there was reference of the need to ensure that any advice is clear and readily accessible to all. Some respondents also referred to different organisations that could provide advice, with one network, professional and trade body noting the need for strong partnership between industry and local groups.

Enabling Connections

Heat Users

- 216. The consultation paper proposed that, for existing buildings, Scottish Ministers would require the public sector to assess the potential for using low carbon heat, including the connection of its buildings to district heating, in collaboration with local authorities preparing their LHEES, and any local-authority-initiated procurement process. Scottish Ministers could also encourage public sector connection where it is socio-economically cost effective to do so.
- 217. For new buildings, the consultation paper proposed that local authorities would continue to encourage new buildings to connect to heat networks via the proposed district heating consent process, with new provision to require them to undergo socio-economic assessment, and incentives. Scottish Planning Policy encourages the development of heat networks and future versions will have regard to Scottish Government strategies and requirements in district heating in its preparation.
- 218. Question 13 asked:

Q13 What are your views on the proposed approach to connecting heat users?

- 219. Fifty respondents, across all sub-groups, commented in response to this question; almost half across all sub-groups noted their support of what was proposed in the consultation paper.
- 220. Although there was **broad agreement with what was being suggested in the consultation paper, a number of respondents noted provisos** and a number of key themes emerged.
- 221. Some respondents across all sectors noted the need for encouragement to connect and felt that measures for encouragement could be a significant influence on the development of district heat networks. Allied to this point, the need to raise awareness and educate people about district heating networks and the benefits they offer was cited by a small number of respondents, particularly as district heating is relatively unknown in the UK.
- 222. While this consultation did not propose introducing a power to compel, some respondents spontaneously referred to this, although views were mixed on this concept. A small number of respondents referred to the benefits of having power to compel, with some suggestions that strategic anchor loads should be required to connect. A very small number of local authorities noted that public procurement presents obstacles in the development of district heating networks; and there were some suggestions that if there is no compulsion for public sector bodies to connect, there will be a need to strengthen the approach to securing connections or changes to the ways in

which public procurement can be used. Those less in favour of the power to compel noted that there should only be a requirement to connect an energy user where it is demonstrated and evidenced by socio-economic assessment. There were also a very small number of comments from those in the business & industry sector that the power to compel should only be used as a last resort and that there would also need to be a process to challenge socio-economic assessments.

- 223. A small number of respondents in the business & industry sector and network, professional and trade bodies noted their support for district heating to operate under a separate legal regime rather than being tied to the planning process. This was on the basis that other legislation is already in place that covers energy efficiency; also, it might not always be economically viable to maintain a district heating network. These respondents also noted that new buildings are already constructed to be energy efficient and deliver significant carbon reductions. There were also a very small number of comments that district heating should not be used to impede development or jeopardise project viability.
- 224. Other comments made by very small numbers of respondents included:
 - Scope for buildings to proceed with other low carbon options if they are demonstrated to be more effective, or that socio-economic assessments should not encourage district heating schemes over other low carbon alternatives before the evidence base is complete.
 - A need to consider the financial implications of district heating networks.
 - Retrofit should be a priority before connection to district heating networks.
 - Consideration needs to be given to incentives for new build to support district heating where possible.
 - District heating networks will not be viable in all locations, for example in small settlements or in areas where there are off gas grid premises.
 - A need to consider the costs associated with district heating and whole life costings in comparison to conventional heating systems.
 - A need for SAP calculations to include utilisation of waste heat.

Surplus Heat Suppliers – Further call for evidence

225. The consultation paper set out proposals for a phased approach for non-domestic sectors with potentially usable surplus heat, applying to both existing and new (including significant refurbishment or expansion) plant, to connect and supply heat. Phase 1 would utilise a voluntary approach; phase 2, an enabling approach, and phase 3 would be compulsory mediation. Mediation would be carried out individually or jointly by relevant consenting bodies or regulators such as local authorities, SEPA or the national delivery mechanism. Planning authorities would continue to have their existing discretionary planning powers and SEPA as statutory consultee, to encourage the infrastructure needed for new non-domestic sector

developments with potential usable surplus heat to make connections to district heating.

226. Question 14 asked:

Q14 What are your views on the proposed phased approach to non-domestic sectors with potentially usable surplus heat?

- 227. Forty-one respondents, across most sub-groups, with the exception of public sector respondents and those in the 'other' sub-group, opted to provide commentary in response to this question, with over half of these noting their support for the proposed approach. That said, there were some qualifying statements, for example, reference to the need for incentives to be offered to accommodate different drivers for different sectors and organisations to share surplus heat or for encouraging connection to help mitigate the long payback periods within this sector.
- 228. Once again, there were references to the need to engage with organisations with surplus heat and the need for encouragement to engage. There were also a small number of references to the need for a viable business case to be presented as this would be more effective than the levels of mediation being proposed.
- 229. While respondents commented that Phase 1 and Phase 2 are likely to be successful, some had an issue with Phase 3. The key reason being that Phases 1 and 2 allow for collaboration but Phase 3 bringing together unwilling partners would be of limited value; for example, compulsory mediation could create a hostile environment or that it would not be conducive to resolving major issues. A very small number of respondents suggested that compulsory connection might be more effective than Phase 3.
- 230. A small number of respondents requested clarification on the timescales being proposed.
- 231. Other comments raised by very small numbers of respondents included:
 - The limited number of opportunities where heat networks are close to significant sources of surplus heat.
 - The Scottish Government will need to review its approach at regular intervals to ascertain whether additional intervention is required.
 - Local authorities, if expected to adopt a mediation role, will need access to additional resources.
 - A preference for a mediating organisation to be an independent body.
 - That it is not desirable to produce excess heat.
- 232. The consultation paper explained that SEPA currently regulates activities in the non-domestic sector that impact on the environment through a number of individual regulatory regimes, some of which include consideration for energy

efficiency and heat. However, energy efficiency and heat are not the primary objective of these existing regimes, so the Scottish Government is keen to gather evidence from stakeholders to assess the scope and desirability for achieving more in the areas of energy efficiency and heat within the current suite of regulatory regimes. This information will be used to inform future policy development. The consultation paper posed a number of questions in relation to views on a number of aspects.

233. Question 15 asked:

Q15 Requiring all regulated non-domestic sector with potentially usable surplus heat to carry out energy efficiency assessments, including heat (and its recovery, and onsite and offsite use), and implement recommendations where feasible.

- 234. Overall, 30 respondents opted to provide commentary in response to this question, most of whom agreed with the requirement as suggested.
- 235. A key theme, albeit only cited by a very small number of respondents, was of a need to define 'feasible', with one network, professional and trade body noting that it is not possible for the Scottish Government to take decisions on what is feasible for a business or where a business should make investments.
- 236. Only a small number of respondents were opposed to this proposal, with key reasons being that:
 - Energy efficiency assessments are expensive and not all are appropriate to all regulated non-domestic sectors.
 - Some requirements are already covered under The Energy Savings
 Opportunities Scheme (ESOS), Pollution Prevention and Control (PPC),
 Climate Change Agreements and European Union Emissions Trading
 System (EU ETS) and that enabling investment in innovative solutions
 alongside the existing requirements would be more productive and less of
 a burden on businesses.
 - Allied to this point, a very small number of respondents noted that large companies are already required to undertake ESOS assessment and that, unlike at present, they should be required to implement recommendations made.
- 237. There were also a very small number of comments on the need to consider any additional regulatory requirements in relation to existing regulatory requirements and how this would align with the current regulatory role of SEPA (cited by respondents in the local government sub-group).
- 238. A very small number of respondents noted that specific sites offer greater potential for usable surplus heat. There was also a suggestion that there would be potential for heat collection in other infrastructure beyond the non-domestic sector within LHEES areas.

- 239. A small number of respondents noted that incentives will be needed to ensure private sector compliance, with suggestions that the Scottish Government should consider using the tax system and offering tax breaks or making more effective use of the planning system to encourage the location of heat recovery projects in certain areas such as those with industrial clusters and high heat demand.
- 240. Question 16 then went on to ask:

Q16 How should energy efficiency (including heat) be assessed across the regulated non-domestic sectors – including consideration for energy efficiency beyond the site boundary?

- 241. Twenty respondents provided commentary in response to this question; most suggestions were made by only one or two respondents. A small number of respondents referred to ESOS, with suggestions that this would incorporate a requirement to comply with the LHEES, or commented on the potential to improve uptake of this by offering a system of incentives. Other suggestions included assessment by:
 - Inspection.
 - Working with the non-domestic sectors.
 - Reaching conciliation if there are issues.
 - Prior engagement with the relevant professional bodies, including SEPA and other sector-specific organisations.
 - Suitable benchmarks relevant to the nature of an organisation's activities.
 - Using the EPC regime as a foundation for any new assessment requirement.
 - Assessment of greenhouse gas emission savings or emission efficiencies that might be achieved in district heating schemes.
 - A system of monitoring and targeting based on the lines of a Zero Waste Scotland project.
- 242. There were some references to specific types of data that could be collected and these included:
 - Data on the amount of heat produced in excess of the business' own requirements.
 - Data on hours of production.
 - Data on summer and winter demand, and peak and off peak times.
 - Energy demand for floor space.
 - Quantum and quality of excess heat.
- 243. Once again, there was reference of a need to minimise any additional burden on businesses and a preference for incentive schemes rather than regulation.

244. Question 17 asked:

Q17 Could a more consistent approach be achieved within the PPC regime, with the existing energy efficiency requirements for Part A sites being applied to Part B sites?

- 245. Fifteen respondents provided commentary.
- 246. Around half of these respondents favoured the existing energy efficiency requirements for Part A sites being applied to Part B sites.
- 247. Other issues raised, each by only one respondent included:
 - This should be rolled out voluntarily because smaller Part B sites will have to pay proportionately more for an assessment; the potential for a light touch assessment.
 - Sites already fall under the PPC regime and are regulated by SEPA as well as participating in the EU ETS, with Scope 1 emissions already being subject to year on year target reductions.
 - It will be important to use SEPA's powers and capacity to advise businesses of opportunities and require them to take up these opportunities.
 - This would need to be financially viable.
 - Would a more consistent approach be achieved by extending the requirement to Part B sites?
 - PPC regulations would work contra to a waste heat supply obligation.
- 248. Question 18 then asked:

Q18 Which benchmarks of criteria should be used / considered in assessing energy efficiency?

- 249. Overall, 21 respondents opted to provide commentary to this question and a range of different benchmarks or criteria were suggested.
- 250. The sector or nature of an organisation's activities were referred to by a small number of respondents, primarily within the public sector, with suggestions for different metrics in different sectors or for energy efficiency assessment to be appropriate to the building construction type.
- 251. There were a very small number of requests for research and best practice studies to help develop a better understanding of what works (cited by local government respondents).
- 252. Links with the planning process were noted by a small number of respondents in the business & industry sector or network, trade and

- professional body sector with suggestions that energy efficiency should be benchmarked against levels set through Scottish Building Standards.
- 253. Some existing approaches were cited by respondents, with reference to Energy Performance Certificates (EPCs), mostly cited by respondents in the local government sector, as a possible starting point, although there were also acknowledgements that these have limitations, for example, that they do not account for regional variations. Some other existing benchmarks were also suggested; for example, energy cost (£/m2) or CO2 emissions (tonnes CO2/m2). One organisation in the network, professional or trade body sector commented that this is already covered by a range of policy measures that target energy efficiency and energy use; these included the Climate Change Levy, Climate Change Agreements and ESOS. Another respondent in the local government sector also suggested that there should be regulation for minimum standards via ESOS to incorporate a requirement to comply with the LHEES.
- 254. Finally, there were a small number of suggestions that CIBSE or other similar organisations could provide advice on this issue.
- 255. Question 19 asked:

Q19 What range of industrial processes should be covered, including size and sector, and why?

- 256. Twenty respondents opted to provide commentary.
- 257. The key theme emerging, and cited primarily by local government organisations, was that all sectors should be included or that the principle should apply to all businesses. Other areas cited by only one or two respondents included:
 - All industry within the potential heat map.
 - All sites in sectors with heat demand or waste above 100MW so all potential opportunities for the use of surplus heat or energy are captured.
 - Industrial processes that are stable and within a specified distance of a potential network to minimise transition losses.
 - Any organisation that currently has to report under the ESOS framework.
 - All organisations currently regulated by SEPA, although one organisation noted that sectors already covered by other schemes should be excluded.
- 258. There were a small number of requests for further research to better understand the amount of surplus heat produced by different parts of the non-domestic sector. One organisation in the local government sector referred to recent studies that have identified some of the most suitable industrial processes.

259. One respondent in the academic sector noted their disagreement with the approach on the basis that the existence of waste heat on its own is not a sufficiently strong reason to develop a district heating scheme.

Enabling Activity and Additional Areas for Consideration to Support the Regulatory Approach

- 260. The consultation paper noted that the role and duration of the SEEP programme means that there is a need for co-ordination to ensure consistent and sustained delivery in line with the Scottish Government's long term fuel poverty and climate change targets. There are a number of potential national delivery mechanisms that could support local authorities in delivering their proposed functions for LHEES and district heating regulation, and which could support delivery and governance of SEEP more widely.
- 261. Question 20a asked:

Q20a What are your views on the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES and district heating, and which could support delivery and governance of SEEP more widely?

- 262. A total of 54 respondents opted to provide commentary to this question, with the majority of these noting their support for the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES, district heating and SEEP more widely.
- 263. A number of these respondents echoed advantages outlined in the consultation paper; such as ensuring consistency, efficiency and standards across all local authorities and ensuring that the best approaches are used; or the capacity to provide assistance, advice, share good practice, access data and capacity building. Some of these respondents also noted that this national delivery mechanism could be a platform for a collaborative approach between industry, government and research.
- 264. Some respondents also noted that the suggested functions are appropriate, although some other respondents outlined additional functions they felt were appropriate to a national delivery mechanism. These included:
 - Leadership and meaningful engagement across government and agencies to ensure the needs of SEEP are met.
 - Governance of SEEP to ensure all targets are met covering fuel poverty and carbon reduction.
 - Standard setting and overall quality enforcement.
 - Enforcement.
 - Centre of best practice.

- Procurement support.
- Research and development.
- Monitoring and reporting.
- Co-ordination with other support organisations such as HES / ZWS.
- Review of building standards and planning to support delivery.
- Licencing.
- Developer of last resort.
- Finance and incentives.
- Consumer engagement.
- To ensure consistency of approach with building regulations and planning policy.
- 265. Some respondents made qualifying statements and these included the **need** to ensure flexibility so that LHEES can offer an individualised approach taking into account local input or for the need for links with planning policy.
- 266. **Governance of the national delivery mechanism** was an issue cited by some respondents, with some citing the need for this body to be independent or at arm's length from government; although a small number of respondents suggested this mechanism should be a Scottish Government Agency. A small number of local government organisations felt this should be a centralised regulatory body within the Scottish government to ensure consistency and compliance.

267. Question 20b then asked:

Q20b What are your views on the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES and district heating, and which could support delivery and governance of SEEP more widely? What form should it take?

- 268. A total of 32 respondents provided commentary to this question, although some reiterated points made in relation to the previous question. A key theme emerging was what types of organisation to include and the need to collaborate. In essence, respondents noted that a broad range of different stakeholders could participate and these included local authorities, public and private sectors and the 3rd sector.
- 269. Once again, there was reference to governance arrangements for a national delivery mechanism, with respondents echoing the points made at the previous question.
- 270. Question 20c asked:

Q20c What are your views on the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES and district heating, and which could support delivery and governance of SEEP more widely? What functions should it have?

- 271. Forty respondents chose to provide an answer to this question, although many of these again reiterated points raised in the previous two questions. Respondents cited a wide range of different functions that could be undertaken by a national delivery mechanism and these included:
 - Analytical and planning functions.
 - Oversight / enforcement of technical standards / ensuring licensees meet their obligations; monitoring and reporting.
 - Providing technical expertise.
 - Providing an aggregate perspective on LHEES to ensure a whole-systems approach.
 - Promoting standardisation of technologies.
 - Agree protocols for control systems.
 - Dealing with procurement, for example, by streamlining procurement across activities.
 - Ensuring consistency in customer service levels.
 - Arbitration of challenges over zoning activity.
 - Development of guidance on best practice and delivery of training.
 - Independent assessment of the viability of schemes.

- Development of business plans and delivery of programmes.
- Financing programmes / investment.
- Establishment and maintenance of standard tools and databases.
- Collaboration with partners and stakeholders and acting as an interface between local authorities and potential concession holders.
- Support to local authorities in piloting new approaches; and capacity building.
- Policy development.
- Developer of last resort.

Incentives

- 272. In summer 2017, the Scottish Government announced support to 11 local authorities to pilot the development of an LHEES in their areas through SEEP pilots. Prior to any introduction of a statutory duty to prepare LHEES, this programme of pilot capacity building support would be made available to all of Scotland's local authorities. There is also support available for the district heating elements of wider local strategies through the Heat Network Partnership local authority strategy support programme.
- 273. The Scottish Government is exploring options for procurement frameworks to support local authorities. There is also a range of financial support available through a number of different programmes. However, with the Low Carbon Infrastructure Transition Programme (LCIPT) and the Renewable Heat Incentives being funded until 2020/21, there is a need to consider options for providing support to district heating as part of the SEEP programme and its development.

274. Question 21 asked:

Q21 Please let us know any views you have on the most cost effective way of supporting schemes that are socio-economically appropriate and in line with the local authority LHEES.

- 275. Forty respondents provided commentary in relation to this question, with some of these reiterating the **importance of grants**, **loans and incentives**. For example, grant funding was seen as important by some respondents as it can help to de-risk and progress projects, particularly as initial start-up costs are high. A very small number of respondents noted that it is important to have consistency in available funding as the start / stop nature of some funding streams can create risks to project outcomes from an investment perspective.
- 276. Respondents, primarily in local government, business & industry and network, professional and trade bodies cited a range of different types of grant funding or organisations providing grant funding that would be useful to help further development of LHEES. These included:

- Heat Network Investment Project (HNIP), although there were one or two requests for a simplified version of this funding.
- Low Carbon Infrastructure Transition Programme (LCIPT); some respondents felt this plays an important role in bringing forward pilot schemes and new technologies, although there were also some comments that LCIPT projects suffer from short deadlines.
- Renewable Heat Incentive (RHI).
- A Low Carbon Investment Fund.
- ECO funding,
- Waste Heat Incentive.
- Similar schemes to CAReS grant / loan funding.
- District Heating Loan Fund, operated by the Energy Saving Trust (EST); there were a small number of requests for the operation of this to be reviewed.
- Resource Efficient Scotland.
- Local Energy Scotland.
- A substantial funding mechanism via Scottish Futures Trust (SFT) for large schemes.
- A dedicated Green Bank to raise finance via public deposits and issue loans.
- An Environmental Bond so the public can invest.
- 277. There were a small number of comments of the need for funding to be provided by a national body and / or on a long term basis and / or to have appropriate delivery lead times to allow for adequate planning, scoping and best value. Also requests for the LHEES / SEEP programme to set out a cohesive framework for how different funding elements will come together.
- 278. There were **some suggestions that business rates and rateable values could be reduced** in order to provide greater confidence to network developers and owners; and that district heating networks could be offered the same level of business rates as are currently offered to gas and electricity networks.
- 279. While comments in relation to grant or loan funding were made primarily in respect of developers and owners, there were a small number of references to a need for favourable connection costs, low / zero interest grants to enable consumers on low incomes or in fuel poverty to be able to connect or for payback on installation to encourage greater uptake. Conversely, there were a very small number of suggestions that the costs of high carbon heating should be increased to provide funding and support to low income households.

- 280. There were a small number of references to the need for stakeholder alignment and collaboration; for example, that working with local communities would be important.
- 281. Once again, the issue of compelling to connect was raised spontaneously by respondents, with some suggestions that this should sit alongside incentives.
- 282. A small number of respondents noted that large scale building retrofits would have wider socio-economic benefits and that district heating policy should be focused on existing building stock given the number of benefits that could be offered. Some of these respondents also noted that the new build sector is likely to bring about any tangible benefits as low carbon heating is already delivered through other means.

Wider UK Heat Market Reform

283. The consultation paper reiterated the Scottish Government's continuation to focus its efforts on areas of heat decarbonisation which are within their competence, while awaiting the outcome of UK Government decisions on the future of gas.

Question 22a asked:

Q22a We would welcome stakeholders' views on our suggested approach to wider UK heat market reform, and in particular any additional evidence that can be offered around the approach that should be taken to decisions on decarbonisation of the gas supply.

- 284. Forty respondents provided comments to this question; **over half of whom agreed with the proposals laid out in the consultation paper**; for example, noting that a no regrets option will be key until there is evidence from the UK Government to ensure the potential least costs routes to heat decarbonisation in Scotland are kept open or that the Scottish Government should look to initiate discussions with the UK Government on how best to implement consumer protection for heat customers in Scotland.
- 285. Some respondents referred to the **need to consider other technologies** alongside district heating, with references to hydrogen, biogas and heat pump technology as well as the need to consider a range of options for decarbonisation of the gas network. A few respondents, mostly in the business & industry sector referred to feasibility studies currently being undertaken by their own or other organisations, which could feed into evidence for the Scottish Government.
- 286. Allied to this latter point, there were some references that research in this sector is still in its infancy and there are limited well established alternatives at present. There were some calls on the need to wait for further evidence.

- 287. A small number of respondents noted that the Scottish Government could play a role in influencing policy direction and providing the UK Government with evidence for its review on the long term future of the gas network or that Scotland has the opportunity to lead the way in the decarbonisation of heat.
- 288. A very small number of respondents noted that while decarbonisation is important, that fuel poverty considerations must also be evaluated, particularly as gas is currently one of the most affordable means for heating homes. One network, professional or trade body suggested: "there should be a test in line with the socio-economic duty for housing, with firm evidence that decarbonisation will not lead to higher fuel bills or increased fuel poverty".
- 289. Question 22b then went onto ask

Q22b We would welcome stakeholders' views on our suggested approach to wider UK heat market reform, and in particular any views on the issues being considered within the remit of the ADE taskforce.

- 290. Seventeen respondents opted to provide a response to this question, some of whom reiterated points made at earlier questions.
- 291. The key comment, primarily cited by respondents in the business & industry sector, emerging in response to this question was support for the approach published by the ADE Taskforce. Other comments made by very small numbers of respondents included support for the Scottish Government's approach in focusing on efforts in heat decarbonisation that are within their remit and support for their approach to wider UK heat market reform. Other comments included:
 - Regulations should be UK-wide or that a key element for investment is consistency of approach between different jurisdictions.
 - The Scottish Government has a role in bringing evidence to the UK Government.
 - Welcome for proposals for a regulatory framework and consumer protection standards.
 - There is a need to reduce demand risk.
 - There is a need to consider the balance between investment risk and regulation and consider how to ensure technical innovation and decarbonisation of the heating system sit together.

Summary of Findings: District Heating Licensing

There was broad support for the overall approach to district heating licensing, with various advantages being cited; these included consumer protection and consistent standards around service levels, service contracts and continuity of supply. A licensing system was felt to be important by some because district heating operators will effectively operate a supply monopoly.

There was broad support for a licensing system, although concerns over the challenge of enforcement were raised by a few respondents.

There were some suggestions that licensing requirements should build upon the content of the Heat Trust or that awarding a licence should be dependent on registration with the Heat Trust and the Association for Decentralised Energy's (ADE) forthcoming compliance scheme.

A significant minority of respondents noted their support for what was being proposed in relation to consumer protection.

Some respondents noted a preference for mandatory, rather than voluntary, protection schemes, based on the standards developed in the Heat Trust Scheme Rules.

Ongoing dialogue with the UK Government was important to respondents, so that Scotland and the rest of the UK would adhere to the same standards and avoid regulatory divergence.

There was general support for a robust complaints resolution process, with requests for a district heating ombudsman service to include counselling and conciliation services to achieve dispute resolution.

Respondents noted the need to increase awareness of benefits through information campaigns, as well as providing jargon-free and consistent information via a range of different information channels. It was felt that advice should be offered by an independent and impartial organisation(s).

Almost half of respondents noted their support for the proposed approach to connecting heat users, although some had provisos.

There were suggestions from some respondents that district heating should operate under a separate legal regime rather than under the planning process.

There was majority support for the proposed phased approach to non-domestic sectors with potentially usable surplus heat.

While respondents felt that Phase 1 and Phase 2 are likely to be successful, not all were supportive of Phase 3.

There was support from a majority of those responding to require all regulated nondomestic sectors with potentially usable surplus heat to carry out energy efficiency assessments, including heat (and its recovery), and onsite and offsite use, and implement recommendations where feasible.

Respondents felt that energy efficiency (including heat) could be assessed across the regulated non-domestic sectors via The Energy Savings Opportunities Scheme (ESOS).

There was support from around half the respondents for the existing energy efficiency requirements for Part A sites to be applied to Part B sites.

Respondents felt that all industrial processes should be included in assessing energy efficiency.

There was majority support for the establishment of a national delivery mechanism to support local authorities in delivering their proposed functions for LHEES, district heating and Scotland's Energy Efficiency Programme (SEEP) more widely.

There was no consensus on the type of governance that should be adopted.

While various suggestions were made on the most cost-effective way of supporting schemes that are socio-economically appropriate and in line with the local authority LHEES, respondents tended to focus on grants, loans and incentives as they help to de-risk and progress projects. There were also calls for funding to be consistent, to have appropriate delivery lead times to allow for adequate planning, scoping and best value, and to be long term.

Over half the respondents agreed with the consultation proposals on Wider UK Heat Market Reform.

There was support for the approach published by the ADE Taskforce.

Assessing Impact

Equality

292. The consultation paper noted that the Scottish Government is keen to include measures to protect groups such as the elderly or disabled from being exploited, and that people with protected characteristics have an equal opportunity to be included in proposals around socio-economic assessment as part of LHEES and district heating schemes.

Question 23 Please tell us about any potential impacts, either positive or negative, you feel our proposed approach may have on particular groups of people, with reference to the 'protected characteristics' listed above.

- 293. Twenty-six respondents, across all sub-groups, responded to this question.
- 294. The key theme emerging was agreement with the proposals towards protecting groups of people who may be more vulnerable to the impact of fuel poverty or agreement that it is essential to consider vulnerable customers and protect them from the negative aspects of district heating. A small number of respondents, primarily in the local government sector simply noted that the proposed approach should lead to positive impacts.
- 295. Only a very small number of respondents cited any potential negative impacts; these included the need to consider the lack of consumer choice or that there could be difficulties in selling the idea of a new heating system and disruption to some vulnerable individuals.
- 296. A small number of respondents in the local government sub-group referred to the need to consider how to communicate and engage with consumers and with any groups affected by SEEP and the rollout of LHEES, with a public sector organisation noting the importance of promoting this well.
- 297. Other issues raised by very small numbers of respondents included:
 - Governance arrangements for SEEP including the LHEES programme need to include specific ongoing assurance arrangements on equalities and human rights issues.
 - Any guidance that is produced needs to be in line with existing guidance on equalities and human rights so as to reduce the potential for duplication and support integrated approaches.
 - There is a need for robust socio-economic assessments to ensure that connection to a district heating network does not have a negative impact.
 - Suppliers will need to demonstrate they have robust processes in place to safeguard individuals with protected characteristics.
 - Some individuals in protected groups are less likely to invest in energy efficiency measures.

- A need for an independent Energy Agency to set and enforce standards to help deliver socio-economic benefits as well as reducing carbon emissions.
- Any developments should be subject to the current planning process.
- 298. Question 24 then went on to ask a series of 5 questions about special provisions or measures that should be considered to ensure protected characteristics are taken into account. Relatively small numbers of respondents answered these questions and many reiterated the same point at each question, so the following paragraphs provide a summary of comments made in response to these questions.

Question 24a Are there any special provisions / measures we should consider / make / include to ensure protected characteristics are taken account of in the LHEES? In your opinion, should the LHEES process specifically include / address the protected characteristics?

Question 24b Are there any special provisions / measures we should consider / make / include to ensure protected characteristics are taken account of in the socio-economic assessment? In your opinion, should that process specifically include / address the protected characteristics?

Question 24c Are there any special provisions / measures we should consider / make / include in terms of the installation of networks in order to minimise disruption to people with mobility problems or any other protected characteristic?

Question 24d Are there any special provisions / measures we should consider / make / include in terms of consumer protection, that would better assist in ensuring that people with protected characteristics will be safeguarded (taking account of our limited legislative competence in this area?

Question 24e Are there any special provisions / measures we should consider / make / include in terms of communications, that would better assist in ensuring that people with protected characteristics will be kept informed and can fully participate?

- 299. Across these five questions, respondents noted the need to ensure that protected characteristics should be included and addressed in LHEES, that developing strong consumer protection will ensure that vulnerable groups are protected and that there should be no barriers with anyone wishing to engage. A key theme was agreement that protected characteristics are taken account of in the socio-economic assessment, albeit that some respondents also noted that they must be based on a robust evidence base.
- 300. Respondents referred to the **need to ensure training is offered to** individuals involved in LHEES so that they can deal appropriately with

- **groups of individuals with protected characteristics**. Allied to this, there were some calls for appropriate guidance and examples of best practice to be provided.
- 301. Communication with individuals with protected characteristics is seen as being important and there were suggestions for a wide ranging engagement process to involve a wide range of individuals. The need to offer information via a range of different channels and taking into account specific needs was a key theme emerging. There were also some suggestions of the need to ensure that representative groups and community organisations are included in any engagement activities. A wide range of communication platforms were suggested and included outreach engagement via community and representative organisations, libraries and shopping centres. There were also some calls for clear literature in various forms such as pamphlets or newsletters, along with the potential to use social media.
- 302. In relation to the installation of networks, there was **broad agreement that this should adhere to considerate construction** in terms of minimising disruption; and that advance notice should be given to customers.
- 303. In terms of ensuring that people with protected characteristics will be safeguarded, a small number of respondents suggested that projects should be encouraged to apply for membership of the Heat Trust or that suppliers need to demonstrate they have robust processes in place to safeguard individuals with protected characteristics. There was a suggestion that there should be alignment with existing standards in other regulated utility markets.
- 304. There were a small number of suggestions for suppliers to keep registers of vulnerable customers so that they can communicate the assistance and protection available to those who will need it. One respondent suggested the maintenance of one register across all utilities rather than separate registers being maintained by each supplier.
- 305. There were a small number of comments that existing legislation already covers the needs of those with protected characteristics or that any new policies will need to align with existing legislation such as the Public Sector Equalities Duties.

Business and Regulation

306. A Business and Regulatory Impact Assessment (BRIA) analyses whether a policy is likely to increase or reduce the costs and burdens placed on businesses, the public sector and voluntary and community organisations. While it is not possible at this point in time to conduct a full analysis of costs and impacts, the consultation asked:

Q25 Please tell us about any potential costs or savings that may occur as a result of our proposed approach and any increase or reduction in the burden of regulation for any sector.

307. Thirty-three respondents opted to provide a comment in response to this question.

Potential costs

- 308. A greater number of these respondents focused on potential costs, with the key theme, primarily cited by local government, being that local authorities would have increased costs due to the need for additional resources, additional staff, increased expertise and so on.
- 309. A small number of respondents in the business & industry sector, and a network, professional and trade body respondent commented that heat networks in new homes are unlikely to be economically viable because new homes are already highly energy efficient. A small number of respondents also referred to increased costs for businesses because of the regulations under which they would operate, the costs of bidding for, and obtaining, consent. One network, professional and trade body noted,

"The relationship between cost and risk should be a key principle in informing how a regulatory approach manages risk for district heating. Reductions in risk and perceived risk will reduce the cost of capital for new schemes and the cost of development and operation, therefore reducing costs for heat consumers. Regulatory approaches which do not reduce risk may add cost to schemes, and therefore costs to customers".

Potential savings

310. Only a small number of respondents identified any likely savings, with some local government organisations referring to the potential for residents to make significant savings from the development of an LHEES due to improvements in thermal energy or having a more efficient heating supply through district heating. In terms of savings to non-domestic organisations, there were suggestions that the development of LHEES could lead to a reduction in the Climate Change Levy, CRC or EU ETS costs. A very small number of respondents referred simply to the potential for economies of scale that could be achieved.

Privacy

311. The consultation paper explained that a Privacy Impact Assessment (PIA) considers the protection of personal data and asked respondents if they were aware of any impact in this area:

Question 26 Please tell us about any impact on individual privacy / data that may result from our proposals. If there is an impact on individual privacy, are there any special provision / measures we should consider / make / include that would better assist in ensuring that this privacy impact is lessened / negated?

- 312. Thirteen respondents opted to provide commentary to this question. The key themes emerging were that LHEES strategies need to incorporate the most stringent requirements of the Data Protection Act, with a small number of respondents referring to the need to consider the new GDPR legislation being introduced in May 2018; also that there is a need for national guidance and for guiding principles to be applied.
- 313. A very small number of local government respondents noted that security of data is of importance and that guarantees regarding the secure management of data will need to be offered. A similar number again local government respondents also noted that there will be a need to carry out Privacy Impact Assessments to determine the impact on an individual's privacy and to be able to identify and manage and privacy risks, and that anonymised data should be used wherever possible.

Summary of Findings: Assessing Impact

There was general agreement with the need to protect groups of people who may be more vulnerable to the impact of fuel poverty, with very few potentially negative impacts being outlined by respondents.

Respondents noted the need to ensure that protected characteristics should be included and addressed in LHEES and that developing strong consumer protection will ensure that vulnerable groups are protected.

Respondents tended to focus on potential costs in relation to the Business and Regulatory Impact Assessment, rather than potential savings. The key cost identified was that local authorities would have increased costs due to the need for additional resources, staff and expertise.

Likely savings outlined included the potential for residents to make savings on their heating bills.

There were comments on the need for LHEES to incorporate the requirements of the Data Protection Act; and also some reference to the need to consider the new General Data Protection Regulation (GDPR) requirements being introduced in May 2018.

Appendix: Respondent organisations

Respondent organisations
3rd sector / community groups
Changeworks (Resources For Life)
Consumer Futures Unit at Citizens Advice Scotland
Energy Agency
Energy Saving Trust
Ore Valley Housing Association
Sustainable Cupar
Transition Edinburgh
Zero Waste Scotland
Academic
Energy Poverty Research
Science, Technology and Innovation Studies (STIS) Energy Group, University of Edinburgh
University of Edinburgh – Heat and the City Team
Business & Industry
Aberdeen Heat & Power Co. Ltd
CALA ltd.
Doosan Babcock
EDF ENERGY

ENGIE UK Ltd
E.ON UK plc
Metropolitan Infrastructure Ltd
Pinnacle Power
Ramboll UK Ltd
Scottish Power
Scottish Renewables
SGN
SSE Enterprise
Vattenfall
Local Government
Aberdeen City Council
Aberdeenshire Council
Argyll & Bute Council (Housing Services)
Association of Local Authority Chief Housing Officers
COSLA
Dumfries and Galloway Council
East Dunbartonshire Council
Falkirk Council
Fife Council
Glasgow City Council
Highland Council

Inverclyde Council
North Ayrshire Council
Scottish Borders Council
South Lanarkshire Council
West Dunbartonshire Council
West Lothian Council
Network, Professional or Trade Body
Chartered Institute of Housing Scotland
Existing Homes Alliance Scotland
Glass and Glazing Federation
Heat Trust
Homes for Scotland
Mineral Products Association/ Mineral Products Association Scotland
Mineral Wool Insulation Manufacturers Association (MIMA)
RTPI Scotland
The Scotch Whisky Association
Scottish Federation of Housing Associations
Scottish Property Federation
Sustainable Energy Association
The Association For Decentralised Energy
The UK District Energy Association

Public Sector
Competition and Markets Authority
Historic Environment Scotland
NHS GG&C
NHS National Services Scotland – Health Facilities Scotland
Scottish Enterprise
Other
White Hill Design Studios
6 organisations - name withheld
3 individuals



© Crown copyright 2018



This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit **nationalarchives.gov.uk/doc/open-government-licence/version/3** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: **psi@nationalarchives.gsi.gov.uk**.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at The Scottish Government St Andrew's House Edinburgh EH1 3DG

ISBN: 978-1-78781-377-9 (web only)

Published by The Scottish Government, November 2018

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA PPDAS494347 (11/18)