

# Transport and Environment Committee

10am., Tuesday, 3 June 2014

## Heat Generation Policy Statement: Scottish Government Consultation

Item number	7.21
Report number	
Executive/routine	Executive
Wards	All

### Executive summary

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The Scottish Government has launched a consultation on its Heat Generation Policy Statement. This sets out how low carbon heat can be provided to a range of consumers in Scotland and a framework for investment in the future of heat. The Policy discusses how Scotland might reduce the amount of energy used for heat and reduce the pressure on energy bills. A number of questions have been asked as part of the consultation.

The response suggests that the Council should be supportive of the Policy Statement in view of its own carbon targets and pledges. However, Scottish Government should ensure that adequate funding and technical support is in place for councils and housing providers if they are to develop district heating programmes. Work to develop the Council's Sustainable Energy Action Plan (SEAP) will include a priority programme to address renewable heat and develop district heating.

### Links

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Coalition pledges	<a href="#">P50</a> <a href="#">P53</a>
Council outcomes	<a href="#">C16</a> <a href="#">C18</a>
Single Outcome Agreement	<a href="#">S04</a>

## Heat Generation Policy Statement: Scottish Government Consultation

### Recommendations

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- 1.1 It is recommended that Committee approves the consultation response.

### Background

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- 2.1 The Scottish Government has set a number of ambitious climate change targets to reduce carbon emissions by 2020 and 2050. A key target is to deliver 11% of non-electrical heat demand by renewable sources by 2020 through the increased use of low carbon heat and district heating. Consequently, the Scottish Government has launched a consultation on its Heat Generation Policy Statement. It is seeking feedback on how low carbon heat can be provided to a range of consumers in Scotland and a framework for investment in the future of heat.

### Main report

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- 3.1 The consultation closes on 9 June 2014 and poses a number of questions to stakeholders on low carbon heat and district heating. It is suggested that the Council should be supportive of the aims of the Policy Statement and the response to this is contained in Appendix 1.
- 3.2 The Council is already developing its Sustainable Energy Action Plan (SEAP) which will set out how it will reduce carbon emissions by 42% by 2020. A key priority in the SEAP will be district heating and other measures to increase the amount of renewable heat in the city.
- 3.3 Current activity in this area includes:
- feasibility studies undertaken on the potential for district heating at the Bioquarter and Fountainbridge;
  - Castle Rock ESCO –work to develop how a model licensed energy supply company could work with a local authority. A business case will be produced; and
  - further work on sustainable heating systems for the Council's multi-storey blocks funded by the Warm Homes scheme.
- 3.4 The focus of the Council to date, in developing district heating has been primarily on domestic schemes (there has been some very small non domestic

Combined Heat and Power projects). While the Council is generally supportive of the aims of district heating, the experience gained from these schemes has raised some issues. Specific queries relating to billing, metering and charging will need to be addressed by Scottish Government potentially through regulating heat in the same way as other energy supplies and ensuring robust processes are in place for consumer protection.

- 3.5 Adequate funding needs to be in place to support projects as district heating can be capital intensive. The response recommends that the Scottish Government continue with any specific loan schemes for this technology.
- 3.6 Furthermore, in expanding district heating networks, the role of the public sector should be explicit in providing information to both consumers (domestic and non domestic) as well as potential developers.

## Measures of success

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- 4.1 District heating and low carbon heat can contribute positively to reducing carbon emissions thus meeting overall Council sustainability objectives.
- 4.2 Delivery against the Capital Coalition pledge commitments and Sustainable Edinburgh 2020 objectives, specifically to reduce citywide carbon emissions by 42% by 2020.

## Financial impact

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- 5.1 District heating projects, particularly the larger schemes are expensive. It will be important in the development of future schemes that adequate funding is provided particularly for local authorities. This would assist Councils in undertaking feasibility work and developing business cases.

## Risk, policy, compliance and governance impact

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- 6.1 The Climate Change (Scotland) Act 2009 places a duty on public bodies to act in a way to mitigate the impacts of climate change. The development of district heating and renewable heat can contribute to mitigation thus complying with the Act.

## Equalities impact

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- 7.1 One advantage of district heating schemes is that they can deliver heat at an advantageous cost to consumers, in particular in areas of social housing and those in fuel poverty. These customers would potentially benefit from lower cost heat.

## Sustainability impact

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- 8.1 The development of district heating and decentralised energy can help to achieve a sustainable Edinburgh because they reduce carbon emissions and increase energy efficiency from existing building stock.

## Consultation and engagement

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- 9.1 Relevant service areas have been consulted on this response.

## Background reading/external references

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Scottish Government Heat Generation Policy Statement

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## Links

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<b>Coalition pledges</b>	P50 – Meet greenhouse gas targets, including the national target of 42% by 2020. P53 – Oppose industrial biomass incineration in Edinburgh.
<b>Council outcomes</b>	CO16 – Well housed – people live in a good quality home that is affordable and meets their needs in a well managed Neighbourhood. CO18 – Green – We reduce the local environment impact of our consumption and production.
<b>Single Outcome Agreement</b>	S04 – Edinburgh’s communities are safer and have improved physical and social fabric.
<b>Appendices</b>	Appendix 1 : Council Response

**Summary of Consultation Questions**

Q1: Do you agree with the heat vision and heat hierarchy?

Yes  No  Don't know

Q1a: And why?

*The City of Edinburgh Council has similar aims with respect to renewable heat and is already developing its Sustainable Energy Action Plan that aims to meet a 42% reduction in carbon emissions in the city by 2020. There will be a number of key aims in this document to reduce energy consumption, increase the use of renewables and generate and supply more energy locally. These align with the Policy Statement vision and hierarchy for heat. In addition a key priority within the Council's SEAP will be to address renewable heat and increase the use of district heating in the city. Consequently the Council supports the aims of the Scottish Government in this important agenda.*

Q2: How can we ensure that Scottish businesses are best placed to take advantage of the new products and services which will be required to deliver low carbon heat?

*The Council believes that businesses need to be made aware of the potential benefits from being involved in developing district heating projects such as any revenue potential, reduction in carbon taxes and the benefits for image (corporate social responsibility). This together with information on: skills requirements, guidelines for the regulatory environment (planning, energy markets for example), the scale of capital investment required and examples of how other district heating projects have worked and been financed would provide businesses with more clarity and confidence in this relatively unknown area of energy policy. In turn this helps to address any perceived risks. Fundamentally Scottish businesses will need to ensure they have the skills set to deliver district heating projects,*

*Running supplier events with European contractors experienced in this area to explain the benefits may help businesses in Scotland to understand the issues. Ensuring that Scottish businesses understand the financial models for district heating will be important in lowering risks to potential investors.*

Q3: Taking account of the cost of implementation, what policies should the Scottish Government pursue that will best ensure the impacts of heat decarbonisation to benefit consumers?

*Regulation of heat should be pursued to provide consumers with the same protection as other energy supplies.*

Q3a: What evidence do you have to support this?

Q4: What do you think should be the balance and focus of government intervention, business innovation and individual action and why?

*The scenarios presented in the Policy Statement infer that the only way to generate a surplus is for high take up to happen. However that may be challenging – the example of Green Deal can*

*be used to demonstrate a scheme with very low take up. With this in mind, both supply and demand policy levers should be used to encourage take up. The specific role of the public sector in helping to stimulate demand with both domestic and non domestic consumer could be more explicit here. In particular for councils there could be a number of roles including the use of planning, its own estate, an influencing role and links with communities (appreciating that the role is referred to later in the Policy). In addition, for councils there is an important role in working with developers and potential investors to create confidence that schemes will progress.*

*In this section, the Policy Statement infers that increased fuel costs to consumers is offset by consumers reducing their demand for fuel. However this may be a risky assumption as it assumes that demand stays relatively constant. Is there evidence for this from the Arup study?*

*The reference to the quality of the data is important as future decisions will be predicated on having robust information and data. The Scottish Government should ensure that robust data on heat is developed as relying on DECC data has a two year lag time.*

*The modelling appears to be over a 40 year timeline. Is this also the lifetime of the any assets?*

Q5: Given the existing financial incentives and policies in place, what other mechanisms do you think would result in significant behaviour change in both homes and non-domestic buildings and processes?

*Directly promoting the benefits to consumers would be useful in addressing behaviour change. A caveat however is that the Government should consider how to mitigate any cost increases in heat in particular to vulnerable communities. The consultation states that the costs of heat could increase due to new interventions.*

Q6: How do you think a national heat map could be used to support the development of a low carbon heat sector for Scotland?

*A national heat map could be useful in identifying major heat loads particularly in urban areas where there could be potential for expanding heat networks. This could be helpful for future investments and developments and especially for projects at scale. This provides confidence to the sector in terms of future capacity and projects.*

*A national heat map would also be useful for evaluating any synergies between local authority areas where collaboration on schemes might be possible. It would also be good to map the Scottish Household Condition Survey fuel poverty indicator to this to look at the areas of greatest need for district heating.*

Q7: Do you support the proposed unit of measure for the overall district heating target of 1.5 TWh by 2020?

Yes  No  Don't know

Q7a: And why?

Q8: Do you support the level of ambition for the district heating target? Q8a: What evidence do you have to support your views?

Yes  No  Don't know

*However a caveat is that this will need to be supported by adequate funding mechanisms to support councils in the development of any district heating initiatives (both domestic and non domestic schemes) which can be capital intensive. These will need to be flexible and assurances as to the longevity or continuation of the current District Heating Loan scheme would be important.*

Q9: Do you support the level of ambition for the number of homes to be connected to district heating by 2020?

Yes  No  Don't know

Q9a: What evidence do you have to support your views?

*Evidence seems to point to benefits for domestic consumers using or supplied by district heating. However there are challenges particularly for councils looking to implement district heating, especially those with existing housing stock, in terms of accessing funding and technical guidance. Supporting councils and other housing providers with good guidance on developing schemes, consulting tenants and crucially managing tenants expectations and communications will be essential. Issues such as billing, metering and charging need to have robust mechanisms in place.*

*Adequate funding schemes will need to be in place to support this – same answer as to Q8.*

Q10: Do you have evidence of existing communal heating systems installed before 2000?

Yes  No  Don't know

Q10a: If so please provide details.

*203 homes in Council sheltered housing schemes have older communal heating systems.*

Q11: Do you believe further regulation of heat supply is required?

Yes  No  Don't know

Q11 a: What level of regulation would be appropriate?

*Regulation of heat should be undertaken in the same way as other energy supplies. Issues such as metering, billing and charging are of concern to energy users and it will be important that there is regulation in place to address some of these concerns.*

Q12: Do proposed consumer protection schemes meet the needs of heat users and supply organisations?

Yes  No  Don't know

Q12a: And if not, what changes are needed or what more is needed?

*See answer to Q11. This may need to be looked at depending on whether regulation of heat is considered.*

Q13: Is there sufficient non-financial support for the development of heat networks?

Yes  No  Don't know

Q13a: If not, please comment on priorities and timescales for support? Please provide evidence, where possible, based on practical examples of district heating development.

*This is a fairly new area for local authorities, the private sector and other investors. There is a need for good technical advice from consultants and developers with actual experience of delivering district heating schemes who can advise potential providers. This advice needs to be at an early stage in the development of any potential projects and accessing this needs to be made as easy as possible.*

Q14: Are the many existing financial support mechanisms sufficient to support delivery of district heating systems?

Yes  No  Don't know

Q14a: If no, can you provide information and evidence to demonstrate the need for additional funding or finance mechanisms, indicating the type of funding or finance required, over what timescale and setting out why existing mechanisms do not meet your needs. We would be particularly interested in evidence based on practical experience of development of district heating projects.

*District heating is capital intensive although this will vary depending on the size of the scheme. The Council view is that it is not clear without an analysis of potential or future schemes whether the £10.5 million funding to support schemes will be sufficient.*

*Funding for technical feasibility studies is an important first phase in developing district heating providing the rationale for progressing with any scheme. However while some funding is available through the Energy Savings Trust for domestic schemes there appears to be less funding for non domestic schemes.*

*Encouraging the development of projects, using public sector assistance, European funding and/or the Green Investment Bank may assist in developing projects ready for financing.*

Q15: If the mechanism that you propose was in place, what additional specific outputs and outcomes for district heating would result from your own work and on what timescale?



Q16: Do you have any further evidence on thermal storage and consideration of how it might interact with other technologies and policy priorities?

*No direct evidence but consider this an important element in addressing renewable heat.*

Q17: Do you see heat recovery and information about excess heat available as a useful tool for industry to maximise the benefits of the heat it consumes?

Yes  No  Don't know

Q17a: Do you have any comments?

*This would be important in developing sustainable energy solutions where a mix of technologies may be required.*

Q18: Are there any Scottish specific issues that should be dealt with in the review of the non-domestic RHI?

Yes  No  Don't know

What are they, and what evidence do you have to support your views?

Q19: Without interim milestones and taking into account the existing mechanisms to support uptake of renewable heat technologies, what non-financial mechanisms do you think are most effective in driving this uptake?

Q20: Do you support the approach to focus on three areas to support geothermal: demonstration projects; ownership issues; and development of our geothermal vision and a routemap?

Yes  No  Don't know

Q20a: If not, which recommendations should be prioritised and deprioritised?

Q21: How can the anaerobic digestion industry be best encouraged to avoid useful heat being wasted? We are interested in any evidence or practical experience to support your views.

### **Questions in the Strategic Environmental Assessment (SEA)**

Details of the questions included in the SEA and how to respond are set out at page vi of the SEA document which can be found on the Scottish Government website at:

<http://www.scotland.gov.uk/Consultations/Current>