Towards Decarbonising Heat: Maximising the Opportunities for Scotland: Draft Heat Generation Policy Statement for Consultation



RESPONDENT INFORMATION FORM

Please Note this form **must** be returned with your response to ensure that we handle your response appropriately

	ame/Orga anisation N						
	e Highland						
Title	Mr 🗌 N	Ms 🗌 Mrs	☐ Miss [I	Dr ⊠	P	lease tick as appropriate
Suri	name						
Cai	r						
Fore	ename						
Ste	phen						
2. P	ostal Add	ress					
Chi	ef Executi	ve's Office	,,,,,				
Co	uncil HQ						
Gle	nurquhart	Road					
Inv	erness						
Pos	Postcode IV3 5NX Phone 01				70254	3	Email Stephen.Carr@highland.gov.u
3. P	ermission	ns - I am re	sponding	as			
		Individua		1		up/C	Organisation
			Please tick	as a	appropr	iate	
(a)	a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?			(c)	org ava Scan	e name and address of your ganisation will be made allable to the public (in the ottish Government library d/or on the Scottish overnment web site).	
	Please tick as appropriate Yes No						
(b)	requeste response	onfidentiality d, we will m es available i the followin	ake your to the			res	e you content for your sponse to be made ailable?

	Please tick ONE of the following boxes	Please tick as appropriate ⊠ Yes □ No
	Yes, make my response, name and address all available	
	Yes, make my response available, but not my name and address	or
	Yes, make my response and name available, but not my address	
(d)	policy teams who may be wish to contact you again	se internally with other Scottish Government addressing the issues you discuss. They may in the future, but we require your permission to do ottish Government to contact you again in relation se?
		te ⊠ Yes □No

Summary of Consultation Questions

Q1: E	o you agree	with the h	eat vision and heat hie	rarchy?
Yes	X	No	Don't know	
Q1a:	And why?			

Reducing the heat consumption of buildings is key, and it is important that this include behaviour change (e.g. consumer setting the building temperature at an appropriate setting). Energy efficient buildings make households more resilient in cases of severe weather, as they are better designed to retain heat. Measures to reduce the need for heat should also include energy management systems e.g. smart meters.

Supplying heat in a communal way should be set as a priority over the status quo – that status quo being bespoke boiler units for each building. Work needs to be done on overcoming the cultural barriers to this. This could include raising awareness of best practice, implementing policy utilised across the continent and incentives.

The heat hierarchy should be flexible under certain circumstances. In some cases where the costs of retrofitting a building are too high, the most appropriate option may be to change the fuel used for heating the building. Also, in some areas district heating may not be suitable or may require higher levels of investment, such as in remote communities and particularly in dispersed ones, although the benefits could be significant.

Support should be provided to buildings where the cost of retrofit is high, buildings are off the gas grid and there are high levels of fuel poverty. We note that the consultation document, on page 17, says that the modelling work for the HGPS recognises that the economics of heating for households vary depending on whether they are urban or rural and whether they are on or off gas grid; it would be useful to know to what extent this is the case.

Decarbonising heat is a crucial and challenging issue in the Highlands as the region makes the transition to a low carbon economy. Through the Carbon CLEVER initiative the Highland region has set itself the target of a carbon neutral Inverness in a low carbon Highlands by 2025. Decarbonising heat represents one of the major challenges for meeting these targets and as such any activity which assists the transition to low carbon heat is of great importance.

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?

There could be particular opportunities in respect of:

- Local installers
- Local supply chain
- Procurement contracts cooperative buying
- Publicising and learning from the success of local business e.g. HWEnergy

Consideration should be given to introducing a standardised process such as production of an Energy Report. Specific initiatives could include the following:

- Create awareness of technology and benefits i.e. local exhibition targeting specific groups
- Incentives
- Choice and Installation assistance.

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?

The Scottish Government should pursue policies on the following:

- Legislation, policy and guidance needs to drive change, underpinned by a clear vision of what will be best for the country's future. Industry must be supported, in order to understand and play a key role in delivering that vision including the benefits to consumers.
- Targeting action to those who have the most to benefit e.g. communities in fuel poverty, Scottish Index of Multiple Deprivation (SIMD) areas and communities living off the gas grid network.
- Within all relevant policies, consider the impact on growing families and those vulnerable to heat reduction and consider providing a system of "credits" likened to child tax credits that help negate cost rises to these people.
- The Government needs to regulate heat supply to provide consumers with protection, as heat supply is currently unregulated.
- Public-private joint ventures.
- Planning Considerations and Building Standards for new developments: All new developments of heat users (other than certain exclusions by type and/or size) should show that they have considered district heating and/or low carbon forms of heating. Preference to connect or provide at outset but otherwise enable connection/installation where there is reasonable prospect of future delivery (e.g. where a system is already planned in the locality). If they do not incorporate these as part of the proposals, provide specific justification for that.
- Existing district heating schemes should be developed, expanded and publicised to boost public awareness of district heating.
- Increase awareness of system types generally.
- Fuel supplier databases.
- Policy support to ensure that buildings connected to a district heating scheme see an increase in property valuation.

Q3a: What evidence do you have to support this?

- Costs for consumers including growing families: Cost avoidance to the consumer relies on any cost increases to fuel (from investment in low carbon, fossil free options) being mitigated by consumers reducing their demand for fuel. This may impact negatively on growing families as it assumes a static demand which can be reduced.
- Planning Considerations and Building Standards: Planning could have an
 effective role but a strong national planning policy addressing heat issues is a
 pre-requisite. Building Standards have proved an effective means of
 improving the uplift in building performance and could be effective in
 addressing heat issues.

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

The appropriate balance and focus will depend upon the scale of the proposed scheme or solution. Government intervention needs to be clear with long term commitments and support, to ensure that private enterprises and individuals have confidence to proceed.

Government Intervention – This is key to the long term success of this policy. National Government should also assist in the co-ordination of large scale, and public facing, heating projects. National and local government and public sector organisations can support the development of low carbon heating and heating networks by making heating load available to local and national businesses. Such load can be utilised to form base load for a district heating scheme.

Business Innovation – The private sector can drive innovation in the heating market especially in cases where there is a clear business case. For this to occur there needs to be a clear long term strategy and commitment to low carbon heating (as is outlined in the Towards Decarbonising Heat document). Examples of business innovation in Highland include HWEnergy, Korrie Ltd, and Ingnis. These businesses and other start-ups should be supported as they will play a key role in decarbonising heat.

Individual Action –Individual action key in driving small, isolated, and private developments. Must be able to demonstrate that they can control system to qualify for incentives.

Consumers will require confidence in the long term price of low carbon heat to enable long term investments to be installed.

The public sector has a role in community uptake of measures promoting energy reduction and energy efficiency and low carbon heating options. This role can only realise its potential where there are options that represent best value for households across Scotland and there is not a risk of social or health detriments.

Modelled costs (pages 26 and 27 of the consultation document) are over 40 years. Is there commitment to fund infrastructure for this period? Is this an acceptable period of time or is it just that it shows a payback for two options after 40 years? It would be better to see the short term costs alongside the payback in order that we can be clear what spend is required at local area levels. It is not clear how much of this cost is apportioned to central government, to local government and to the user.

There is a need to be careful with data as although the data is well referenced throughout the document it is clear from the references that the data holds many assumptions and has lagging (of two years) in the case of data from DECC.

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?

There needs to be more government support to community purchasing of energy to help decrease cost if, as the consultation states, the cost of heat (kWh) will in general rise due to interventions.

The Green Deal (referred to on page 31 of the consultation document) is not delivering for Scotland and has significant consumer protection issues. The Energy Companies Obligation (ECO) has been debilitated by stopping and starting of the policy and no commitment from the UK Government to the long-term. The limitations and risk associated with these has disengaged consumers and businesses and the Government has a significant step to take to increase consumer confidence in green energy markets. This consumer protection needs to be addressed before these schemes are relied upon to decrease demand for heat through energy efficiency. Further to this the Government needs to consider the cost and debt to customers from schemes such as Green Deal: even if it lowers average bills, the costs will then go up through the de-carbonisation of the grid as stated in the consultation.

It is disappointing that in respect of Behaviour Change (page 30), the consultation document makes no reference to local energy efficiency advice being promoted by councils and their partners. This is more effective than single national campaigns. It would be interesting to see if our communities were aware of the Greener Scotland website giving information on energy reduction or if the Energy Saving Trust site is better known. We need to stop having multiple websites and need to promote a single point of contact for quality advice.

The Energy Efficiency Standard for Social Housing (EESSH) mentioned on page 32 of the consultation document relies upon the ECO. However, we have just seen through the UK Government consultation on changes to ECO that this is a vulnerable policy which is subject to change and that the changes proposed would mean less money for Scotland.

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

During the period of this consultation, the Scottish Government has made the new Scotland Heat Map available to local authorities through a Framework Agreement. The Highland Council worked with Scottish Government on a pilot heat map and, having signed up to this agreement, we look forward to receiving the relevant extract of the Scotland Heat Map for the Council's area.

The use of the Scotland Heat Map by local authorities is governed by the Framework Agreement, which outlines likely uses and also any limitations and restrictions. The involvement of various 'services' within each local authority in maintenance and use of the heat map, as promoted by the Framework Agreement, should help to support the development of a low carbon heat sector for Scotland. It would be valuable for local authorities to share knowledge on its use as they go forward with it. It will be vital that future updating and maintenance is facilitated by Scottish Government. We are pleased to hear that resource has been identified for the first two years to provide such facilitation. We are also pleased to hear that a public web version of the Scotland Heat Map should soon be available.

Q7: Do you support the proposed unit of measure for the overall district heating target of 1.5 TWh by 2020? Yes X No Don't know
Q7a: And why?
We support the principle of setting a target to drive action. The value of this target should be to drive change at pace whilst still remaining realistic.
Q8: Do you support the level of ambition for the district heating target? Yes X No Don't know
Q8a: What evidence do you have to support your views?
The target should be a stretching target and show a high level of ambition. However, our broad support for the level of ambition is based on limited information. A gap analysis should be conducted on this target to map out the expected progress towards this.
Availability and flexibility of finance is essential to enabling development of district heating systems to meet the target. Is the finance available under the HEEP:ABS programme sufficient to enable local authorities and their partners to implement district heating systems? Can it be coupled with finance on offer through the district heating loans scheme?
Q9: Do you support the level of ambition for the number of homes to be connected to district heating by 2020? Yes X No Don't know Q9a: What evidence do you have to support your views?

Our broad support for this level of ambition for district heating is based on limited information and is qualified as follows.

Care is needed when approaching a target such as this, in that carbon intensive buildings are overlooked in pursuit of connecting those that are easier to achieve but may not have as significant carbon savings.

The target should also factor in carbon savings based on the heat demand of the building and the previous fuel type.

As stated in our response to Question 8a, availability and flexibility of finance is essential to enabling development of district heating systems to meet the target. Is the finance available under the HEEP:ABS programme sufficient to enable local authorities and their partners to implement district heating systems? Can it be coupled with finance on offer through the district heating loans scheme?

Q10: Do you have evidence of existing communal heating systems installed before
2000? Yes No X Don't know
Q10a: If so please provide details.
Q11: Do you believe further regulation of heat supply is required? Yes X No Don't know
Q11 a: What level of regulation would be appropriate?
Full regulation as per other energy supplies and other utilities would be appropriate. A mature heat market will require regulation and as such it would prove prudent to put these structures in place from the outset. There needs to be clarity about who will fund the regulatory body and its set-up, etc and on whether full Building Management Systems (BMS) can be implemented for reporting.
Q12: Do proposed consumer protection schemes meet the needs of heat users and supply organisations? Yes X No Don't know
Q12a: And if not, what changes are needed or what more is needed?
Q13: Is there sufficient non-financial support for the development of heat networks? Yes
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 difficult to answer given that the website has just been launched and there

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

has not been sufficient time to evaluate its level of support.

Yes Don't know X							
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.							
Low revenue budget for developing feasibility studies – support for studies/ developing business cases.							
See also our responses to Questions 8a and 9a.							
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?							
Development of more feasible and investable schemes, allowing more public and private investment opportunities.							
Q16: Do you have any further evidence on thermal storage and consideration of how it might interact with other technologies and policy priorities?							
No.							
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 X No Don't know							
Q17a: Do you have any comments?							
The Scotland Heat Map will already play this role to an extent – a role that can be further developed if additional data on potential sources of heat (including excess/ waste heat) is added in to the map. Again, sharing knowledge between users of the heat map on its development and use would promote wider application of worthwhile initiatives. This could be accompanied by national and local information campaigns, encouraging industry to consider their heat consumption as a 'balance'.							
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 X 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?

Support for developing feasibility studies/ business cases.

Introducing variable stipulations for different tenures.

Q20:	Do you	u suppo	ort the ap _l	proach	n to focus on	three area	as to suppo	ort geothe	rmal:
demo	nstratio	on proje	ects; owne	ership	issues; and	developme	ent of our g	eotherm	al vision
and a	routen	nap?							
Yes		1	lo X		Don't know				
000	10 1	1 1 1		1 (1			1 1 1	1 141 14	•

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

In addition to the three areas identified, collaborative projects should be undertaken with European partners who have identified a source of geothermal heat or have expertise in this area. An example would be working with Coleraine Council, Northern Ireland. This region has a large geothermal heat source, and the incumbent Council are currently investigating the potential use of this. The Highland Council are currently looking to work with Coleraine to develop a potential European project on smart energy and can pass on useful contacts if required.

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.

Energy from waste is not counted towards national recycling targets. This therefore means that in some areas such as Shetland there is a low performance under recycling rate yet a high performance on renewable energy/ district heating. National targets must take into account geographical differences and not promote conflicting policies which can play against each other.

Overall it is regrettable that Energy from Waste (EfW) with associated District Heating (DH) networks is not seen as a useful but small addition to the overall energy mix. Shetland has and remains an exemplar.

No evidence is presented in the draft paper of the Anaerobic Digestion (AD) industry wasting heat. The Council does not possess any evidence to suggest that it is.

The most significant issue pertaining to the use of waste as a renewable heat source is that solutions have been left to the market to develop rather than a whole waste (ie all waste arisings) and whole Scotland view taken of how to maximise efficiently the use of heat from waste through either (or both) EfW and AD and the development of DH schemes which are difficult under the current model.

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