

Future Support for Low Carbon Heat

Overview

<i>General Comments</i>
In addition to our responses below, we would like to note that the consultation focuses on bio methane injection to the gas grid that arises from food waste. There is potential to increase bio methane injection through anaerobic digestion of wastewater sludge, therefore supporting the UK's journey towards net zero. It would therefore be welcomed if bio methane from anaerobic digestion of biosolids could be included within the scope of the Green Gas Support Scheme tariff mechanism.

Detailed Response

Specific Comments

1	<p>Do you agree that the tiering structure as outlined above is appropriate and would deliver the best value for money?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
No comment from Scottish Water.	
2	<p>What are your views on the impact of a 15-year tariff period to support bio methane? Please provide evidence to support your response.</p>
Scottish Water would support a 15 year tariff period. The longer the support period is the greater the certainty around revenue, improving the bankability of bio methane projects and, consequently, more schemes are able to be progressed.	
3	<p>What are your views on the advantages and disadvantages of a shorter 10 or 12-year tariff period and whether they would help maximise value for money?</p> <p>Please provide evidence to support your response.</p>
As per Q2, a longer period of tariff will see more schemes progressed. Any reduction in the tariff period could see fewer projects progressing.	
4	<p>Do you have any views on the appropriate tariff level, within these ranges?</p> <p>Please provide evidence to support your response.</p>
No comment from Scottish Water.	

5	<p>Do you have suggestions of other mechanisms that could be introduced to ensure tariffs deliver the best possible value for money – for example, additional evidence on costs and revenues that applicants to the Green Gas Support Scheme could be required to provide?</p>
<p>No comment from Scottish Water.</p>	
6	<p>From experience of depression, how do you think elements such as the frequency and size of depression, and spend triggers, should change in order to ensure value for money, whilst meeting the need for investment certainty?</p> <p>Please provide evidence to support your response.</p>
<p>Scottish Water understands the reasons for a depression approach. However, the frequency and size of depression can lead to investment uncertainty. As a result, depression points and size need to be sufficiently well communicated to the market. For example Scottish Water had several solar projects in development that either stalled or did not proceed when FIT depression was announced suddenly to the market. Indeed, in one situation, one of our contractors decided to exit the solar market when sweeping cuts to support mechanisms were announced at short notice.</p>	
7	<p>Do you have further suggestions, beyond those mentioned in this consultation, which would help the Green Gas Support Scheme to deliver the best possible value for money?</p> <p>Please provide evidence to support your response.</p>
<p>a) The new scheme should support other low carbon technologies that maximise the potential of bio methane. For example the existing RHI regulations are written in such a way that heat pump technology could be used to heat anaerobic digesters and the heat pumps would attract RHI. In practice OFGEM has interpreted that this is not an eligible use for RHI purposes. Therefore it is likely that most installations would use a proportion of biogas, instead of a heat pump, to heat the digester - resulting in less biogas being available for bio methane production.</p> <p>b) To maximise and properly support the potential of bio methane, treatment by anaerobic digestion of food waste should be prioritised or incentivised over other carbon emitting waste treatments such as composting. Allowing co-mingled (food waste and garden waste together) collection of organic waste reduces options for bio methane production. This is a key strand to supporting the aims of the Green Gas Support Scheme to “encourage continued deployment of AD bio methane plants in order to increase the proportion of green gas in the gas grid” and to “minimise a market hiatus for the bio methane industry”.</p>	
8	<p>Do you agree with the proposals for tariff guarantees for bio methane?</p> <p>Yes/No.</p> <p>How could this be improved?</p> <p>Please provide evidence to support your response.</p>
<p>Yes - Scottish Water supports the proposals for tariff guarantees to improve project bankability.</p>	
9	<p>What are your views on increasing the minimum percentage of waste feedstocks above 50%, now or in the future?</p>

	<p>What could be a suitable new threshold?</p> <p>Please provide evidence to support your response.</p>
	<p>Scottish Water has no comment on the threshold.</p> <p>We would highlight that in rural areas, further opportunities to produce bio methane locally could become financially viable through co-digesting food waste and sewage sludge. Co-digestion with sewage sludge is presently not compatible with local authority targets for recycling of food waste; under the PAS100 Regulations the outputs of co-digestion are deemed as waste and consequently impact adversely on recycling figures. We would ask that the regulatory criteria are explored to consider co-digestion. This would have the benefit of increasing bio methane production whilst also managing digestible waste locally and therefore more sustainably.</p>
10	<p>In light of recent amendments to sustainability criteria in the RED II, do you have any views on whether the UK should look to take into account similar changes for the Green Gas Support Scheme?</p>
	<p>It would be sensible to take into account sustainability criteria for a whole system approach. For example, food waste can currently travel long distances incurring carbon emissions from its transportation even where alternative treatment plants are available more locally.</p>
11	<p>Do you have any views on how the feedstock reporting process for bio methane should be amended compared to the existing RHI requirements?</p>
	<p>No comment from Scottish Water.</p>
12	<p>What measures and technologies exist for reducing ammonia emissions from digestate and what are the barriers to their widespread deployment?</p>
	<p>Scottish Water would support research on technology for the recovery of ammonia from digestate that would allow it to be used within the circular economy.</p>
13	<p>What are the reasons for the lack of commercial demand for digestate and how can the market for digestate be strengthened?</p>
	<p>No comment from Scottish Water.</p>
14	<p>Do you agree with the proposal not to include an additional capacity mechanism within the Green Gas Support Scheme?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
	<p>Yes</p> <p>The tiered tariff proposed would avoid the need for an additional capacity mechanism.</p>
15	<p>Do you have any views on how a change of scheme participant mechanism may differ in the Green Gas Support Scheme to the RHI?</p> <p>Yes/No.</p>

	Please provide evidence to support your response.
No comment from Scottish Water.	
16	<p>Do you agree with the proposal to not allow any interaction between the RHI and the Green Gas Support Scheme?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
No comment from Scottish Water.	
17	<p>Do you agree with our proposal to allow bio methane producers to decide how much bio methane they wish to claim Green Gas Support Scheme payments for within a given quarter?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response or provide an alternative proposal for scheme interaction.</p>
No comment from Scottish Water.	
18	<p>What are the main barriers to the deployment of bio methane AD plants and what potential solutions could help to overcome these?</p> <p>To maximise and properly support the potential of bio methane, treatment by anaerobic digestion of food waste must be prioritised over other carbon emitting waste treatments such as composting. Allowing co-mingled (food waste and garden waste together) collection of organic waste reduces options for bio methane production. Having sufficient tonnage of waste material secured on contract for as long as possible is helpful in supporting business cases for investment. Conversely, having short term, sometimes annual, procurement exercises by local authorities introduces risk. Such procurement practice is not consistent with a long term strategy aimed at supporting both anaerobic digestion and bio methane injection.</p>
19	<p>Do you have views on how the Green Gas Support Scheme could be improved, beyond the ways described in this consultation?</p> <p>Please provide evidence to support your response.</p>
As per answer a) in Q7 above.	
20	<p>Do you have any views on the most appropriate market-based mechanism for green gas support in the longer term, and how this might operate?</p> <p>Please provide evidence to support your response.</p>
Scottish Water supports a future review of incentives for the production of hydrogen.	
21	<p>Do you have any views on industry readiness for a market-based mechanism to support green gas in the longer term?</p>



	Please provide evidence to support your response.
No comment from Scottish Water.	
22	<p>Do you agree with targeting support at domestic and non-domestic installations with a capacity up to and including 45kW?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
<p>No</p> <p>The 45 kW threshold for supporting non-domestic installations is too low. We are concerned that there could be a potential support gap between 45 kW and proposed support for “large scale” which is as yet unclear. Such a limit or a gap between 45 kW and “large” would not support schemes that can have a high impact quickly when compared to small individual heat pumps at 45 kW or less. By way of evidence we are currently installing a 760 kW water source heat pump system in Campbeltown in Argyll. This project would not have progressed without RHI support. The project will displace circa 1 GWh of gas for space heating of a publicly owned leisure centre. The mains gas system at Campbeltown is a “gas island” with compressed gas being driven from Essex to supply the town. Such projects are hugely beneficial in carbon reduction terms. With RHI support the return on investment is very modest. Without RHI support this project would not have happened as it would not have been financially viable. Such a scheme would not be viable under the proposed Green Gas Support Scheme with both a cap at 45 KW and a grant of £4000.</p>	
23	<p>Do you agree that support for buildings technologies should change from a tariff to a grant?</p> <p>Yes/No</p> <p>Please provide evidence to support your response.</p>
No comment from Scottish Water.	
24	<p>Do you agree with our proposal to offer a technology-neutral grant level?</p> <p>Yes/No</p> <p>Please provide evidence to support your response.</p>
No comment from Scottish Water.	
25	<p>Do you agree that £4,000 is an appropriate grant amount to meet the aims of the scheme?</p> <p>Yes/No</p> <p>Please provide evidence to support your response.</p>

No comment from Scottish Water.	
26	<p>Do you agree with the recommendation for a flat-rate grant?</p> <p>Yes/No</p> <p>Please provide evidence to support your response.</p>
<p>No</p> <p>See answer to Q22. We have several projects similar to the Campbeltown example in the pre-investment development stage. These projects will not be viable with both a cap at 45 kW and a grant of £4000. They are large water source heat projects and can deliver scale and market confidence as exemplars of the low carbon technology.</p>	
27	<p>If you believe a variation by capacity should be considered, please provide evidence to justify a process and level for varying the grant.</p>
See answer to Q22 and Q26.	
28	<p>Please provide any relevant views to help inform development of the delivery mechanism.</p>
No comment from Scottish Water.	
29	<p>Do you agree with the minimum efficiency requirements for heat pumps and evidence requirements?</p> <p>Yes/No</p> <p>Please provide further evidence to support your response.</p>
<p>Yes - Scottish Water agrees that a minimum Seasonal Performance Factor should be applied. Having mechanisms in a support scheme that help drive better system efficiencies is consistent with the low carbon strategy.</p>	
30	<p>Do you agree with the proposal to require electricity metering for all heat pump installations?</p> <p>Yes/No</p> <p>Please provide further evidence to support your response.</p>
<p>Yes</p> <p>Scottish Water supports this proposal as it is difficult to evidence the SPF referenced in Q29 without accurate metering.</p>	
31	<p>Do you agree with the proposed air quality requirements set out above?</p> <p>Yes/No</p> <p>Please provide further evidence to support your response.</p>
No comment from Scottish Water.	



32	Do you have any comments on how best to ensure ongoing compliance with fuel sustainability and quality requirements following the redemption of a grant?
No comment from Scottish Water.	
33	Please provide views on the appropriate requirements for the heat loss calculation, as well as the minimum heat loss value that should need to be demonstrated.
No comment from Scottish Water.	
34	Please provide views on any other criteria to ensure that biomass support is focused on hard to treat properties only.
No comment from Scottish Water.	
35	What do you consider to be the main consumer protection risks of providing support through an upfront grant and how might they be mitigated? Please provide evidence to support your response to question.
No comment from Scottish Water.	
36	Do you agree with the proposed budgetary control mechanisms as a means of preventing scheme overspend? Yes/No Please provide evidence to support your response.
No comment from Scottish Water.	
37	Do you agree that quarterly grant windows would prevent overspend and manage demand to ensure an even spread of deployment? Yes/No Please provide evidence to support your response.
No comment from Scottish Water.	
38	Do you agree with not supporting process heating under the Clean Heat Grant? Yes/No Please provide evidence to support your response.
Note the response to Q7 part a.	
39	Do you agree with not supporting biogas combustion under the new policies?

	<p>Yes/No</p> <p>Please provide evidence to support your response, including any wider detail on decarbonisation opportunities for biogas combustion in rural areas.</p>
<p>No.</p> <p>There may be smaller anaerobic digestion plants where it would not be economically viable to install bio methane clean up and injection technology but it may be possible to provide heat to a district heating opportunity. Such an example exists in Stirling where the AD plant is too small to clean up biogas economically for bio methane injection to grid. A district heat network exists locally and biogas to heat is the best environmental solution.</p>	
40	<p>Do you agree with not supporting solar thermal systems under the Clean Heat Grant?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
<p>No comment from Scottish Water.</p>	
41	<p>Do you agree with not supporting hybrid systems under the Clean Heat Grant?</p> <p>Yes/No.</p> <p>Please provide evidence to support your response.</p>
<p>No.</p> <p>For retrofit opportunities heat users often wish to retain their existing system for added resilience. This is in part due to, in their eyes, the low carbon technologies being new and concerns around reliability. This is the case with the aforementioned project at Campbeltown which is retrofitting a water source heat pump as the primary source of heat to displace mains gas. The client wished to retain the existing gas boilers for resilience and peace of mind and without this they would not have allowed the low carbon heating project to take place. With well-designed and accurate metering it is straightforward to separate what is low carbon heat and what is fossil fuel heat.</p>	
42	<p>What improvements could be made to the proposed approach for tackling non-compliance for participants under the Green Gas Support Scheme?</p>
<p>No comment from Scottish Water.</p>	
43	<p>What are the main risks of non-compliance, fraud or gaming associated with the Clean Heat Grant?</p>
<p>No comment from Scottish Water.</p>	
44	<p>What would be the most important features of an audit regime to minimise the risk of non-compliance?</p>



No comment from Scottish Water.

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