



Department for
Business, Energy
& Industrial Strategy

Future Support for Low Carbon Heat

&

The Green Gas Levy

Government response to consultations



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Foreword



Over the last twelve months, COVID-19 has had a significant and unprecedented impact on UK society and economy. As we rebuild from the impacts of coronavirus, we must build back better, prioritising a green recovery, which will bring investment and jobs into areas that will help the UK make progress towards our climate change, air quality, and other environmental targets.

The UK is the first major economy to set a world leading Net Zero target. Action to tackle climate change and to meet the Net Zero target will involve significant investment and innovation by the private and public sectors. Tackling climate change also offers important opportunities for the UK, including supporting high-quality jobs and the growth of new and emerging industries. The Prime Minister's recently published Ten Point Plan for a Green Industrial Revolution sets out how the government will mobilise £12 billion of government investment, and potentially three times as much from the private sector, to create and support up to 250,000 green jobs.¹

An important aspect of tackling climate change, as outlined in the Energy White Paper published by BEIS in December 2020, is transitioning to using clean energy to heat our homes and businesses. The Green Gas Support Scheme represents one part of a much larger package of measures outlined in the Energy White Paper, which will see the UK leading a clean energy transition and ensuring that we build back greener.

This document outlines the government's plans to launch the new Green Gas Support Scheme in Great Britain: a tariff-based scheme supporting the injection of biomethane produced via anaerobic digestion into the gas grid. It also outlines the Green Gas Levy, a new levy on licensed fossil fuel gas suppliers that will fund this scheme. Both the scheme and levy are intended to launch in autumn 2021. Biomethane is currently the only green gas commercially produced in the UK and can be injected into the gas grid for use as a lower carbon substitute for natural gas, helping to decarbonise our gas supplies. The Green Gas Support Scheme is expected to contribute 21.6MtCO_{2e} of carbon savings over its lifetime and will also help to support high quality jobs, particularly in rural areas, by maintaining and building growth in the biomethane industry at a time when economic recovery is so important.

This ambitious policy will help meet the commitments made in the 2019 Spring Statement and 2020 Budget to increase the proportion of green gas in the grid. It will also promote a circular economy by encouraging the use of domestic and industrial food waste to heat our homes and businesses.

A handwritten signature in blue ink, appearing to be 'M Callanan', written in a cursive style.

Lord Callanan

Minister for Climate Change and Corporate Responsibility

¹ BEIS (2020) [The ten point plan for a green industrial revolution](#)

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Introduction

Background

Decarbonising heat is one of the biggest challenges we face in meeting our climate targets. Currently, heating is responsible for a third of the UK's greenhouse gas emissions. Biomethane injection into the gas grid is a low-regrets, cost-effective way of contributing to near term legally binding carbon budgets and decarbonising our gas supplies. The Committee on Climate Change (CCC) state that biomethane will be valuable across all decarbonisation pathways, as it is a practical and established way of reducing carbon emissions.

In the 'Future Support for Low Carbon Heat' consultation, launched in April 2020, the government set out its proposal for a new Green Gas Support Scheme (GGSS) available in Great Britain.² Additional information on tariff reviews was provided in the "Green Gas: Ensuring value for money through tariff changes – more detail" publication in May 2020. In the additional publication 'Green Gas Support Scheme (GGSS): digestate management' in December 2020, we proposed two mitigations against ammonia emissions from digestate, a by-product of AD, for the GGSS participants. The GGSS will help decarbonise our gas supplies by increasing the proportion of green gas in the grid, through support for biomethane injection. We expect the GGSS will contribute 9.7MtCO_{2e} of carbon savings over Carbon Budgets 4 and 5, and 21.6MtCO_{2e} of carbon savings over its lifetime. The consultation also noted the GGSS would be funded by a Green Gas Levy (GGL) to be placed on all licensed fossil fuel gas suppliers in Great Britain. We consulted on the GGL in our 'Consultation on a Green Gas Levy'³ in September 2020.

The UK also faces the huge challenge of the COVID-19 pandemic and the wide range of impacts this is having on the economy and citizens. The government is committed to the UK's recovery, with decarbonisation being an important opportunity to help support the effort. We have worked closely with the devolved administrations to implement the support scheme and the levy across Great Britain.

As with the Non-Domestic Renewable Heat Incentive scheme (ND RHI), we intend to appoint Ofgem as administrator of the scheme and the levy.

Summary of stakeholder responses to the consultation proposals

In this government response, we summarise stakeholder responses to the GGSS section of the 'Future Support for Low Carbon Heat' consultation, and to the later consultation "Green Gas Support Scheme (GGSS): digestate management" and the responses to the 'Consultation on a Green Gas Levy.' An overall summary of the stakeholder responses is set out in this section. The Government plans to publish a separate government response on the Clean Heat Grant later this year.

² BEIS (2020) [Future Support for Low Carbon Heat Consultation](#)

³ BEIS (2020) [Consultation on a Green Gas Levy](#)

Green Gas Support Scheme

The GGSS section of the 'Future Support for Low Carbon Heat' consultation received 167 unique responses and a further 517 similar responses coordinated by environmental NGO Biofuelwatch. Of the other 167 individual responses, approximately 57 were from the anaerobic digestion (AD) and energy industry and 11 were from members of the public. The consultation also saw many responses from a mixture of academics, NGOs and think tanks, businesses, trade bodies and other organisations. The additional information provided later through "Green Gas: Ensuring value for money through tariff changes – more detail" fed into these responses.

Responses to the 'Digestate Management' consultation are also summarised here. It received 20 unique responses.

Overall, respondents were broadly supportive of the proposals outlined in the consultation:

- Many respondents were supportive of the proposed tiering structure and the 15-year tariff lifetime. However, responses were mixed on the appropriate tariff levels.
- Many respondents supported having a degression mechanism, but also highlighted areas where it could be improved compared to the ND RHI.
- Overall, respondents were supportive of the collection of more information on costs and revenues.
- Most respondents were supportive of the proposals outlined for tariff guarantees (TGs).
- There was no clear consensus from respondents on the proposed minimum percentage of fuel from waste feedstocks.
- Respondents were largely in favour of aligning the GGSS's sustainability criteria with the EU's updated Renewable Energy Directive (REDII).
- Respondents had mixed views on the proposals to not allow additional capacity, with those supportive suggesting that the tiering structure would negate the need for an additional capacity mechanism.
- Many respondents supported a change of scheme participant mechanism, and also the proposals to not allow interaction between the ND RHI and GGSS.
- Most respondents supported the proposals to allow participants to decide how much biomethane they wish to claim on the GGSS in a given quarter.
- Many respondents supported the proposals on budget management.
- Many respondents supported the exclusion of biogas combustion.

In addition to the consultation documents, BEIS conducted a series of workshops and webinars to engage with a range of stakeholders. There were four policy development workshops held across May and June 2020. These covered: tariffs and tiering; degression and TGs; sustainability and environmental issues; eligibility and interaction with other government schemes.

Green Gas Levy

The 'Consultation on a Green Gas Levy' received 60 unique responses from suppliers, consumer groups, individuals, and other organisations. Of these responses, 16 were from suppliers, 25 were from consumer groups and associations, and the rest were from businesses, members of the public and other organisations.

Overall, respondents were broadly supportive of the proposals outlined in the consultation:

- Many respondents supported a levy being placed on all gas suppliers, with those who supply green gas exclusively being excluded.
- Respondents' views were split between supporting the proposed per meter point approach and not. Unsupportive respondents largely preferred launching with a volumetric levy instead. However, many respondents understood the rationale for launching with a per meter point levy design.
- Respondents had mixed views on the proposal to apply a flat rate levy. Some respondents expressed concerns on the impact that levy design could have on low income and vulnerable households. Similar to the per meter point responses, many of the respondents who opposed a flat rate levy preferred launching with a volumetric levy instead.
- Most respondents were supportive that levy payments be made quarterly.
- Many respondents agreed with lodging credit cover, as part of the levy payment requirements with Ofgem. This included lodging cover on a quarterly basis and the proposed forms of credit cover.
- Most respondents were supportive of the budget control and financial management proposals, agreeing that the maximum levy collection amount and backdated payments minimises risk and provides certainty for suppliers.
- Most respondents were supportive of the proposed supplier compliance and enforcement package.

In addition to the consultation documents, BEIS conducted a series of workshops in October 2020 to engage a range of stakeholders on the consultation proposals, with their feedback being incorporated into the government's response. The GGL workshops covered the design and scope of the GGL; credit cover and mutualisation; and transition to a volumetric approach.

Impact Assessments were published alongside the 'Future Support for Low Carbon Heat' consultation and the 'Consultation on a Green Gas Levy,' providing an indicative assessment of the costs and benefits of the key aspects of the policy. A Final Impact Assessment will be published following the publication of this government response, taking into account the proposals which will be taken forward. The Final Impact Assessment will set out the evidence underlying the policy decisions made and the impact expected from the policy. This is updated and expanded on from the Consultation Stage Impact Assessments, through development of distributional impacts, implementation of evidence gathered through the consultation, and setting out impacts of the transition from a per meter point levy to a volumetric levy.

Summary of the government response to stakeholder feedback

This government response also sets out the government's consideration of stakeholder feedback and the approach that will be taken on the GGSS and GGL. A summary of the main points of the government's response are set out in this section.

Green Gas Support Scheme

The government has considered the comments and evidence provided in response to policy proposals for the GGSS outlined in the 'Future Support for Low Carbon Heat' consultation. In the government response section to the GGSS from page 10, the government outlines decisions on a 15-year tariff lifetime and a three-tier structure. This section also sets out the

scheme's sustainability criteria and a 50% minimum percentage threshold for waste and residue feedstocks.

The government's decision on TGs is outlined in its response, setting out a TG process similar to that used in the RHI application process, with amendments to the commissioning window and making it compulsory. The decision on annual budget caps is set out in the response, including timings for tariff reviews, degression mechanisms and capital costs data. The government has also decided to include an additional capacity mechanism and to allow interaction with the Renewable Transport Fuel Obligation (RTFO). This response also sets out the eligibility criteria for biomethane producers.

Green Gas Levy

Following the 'Consultation on a Green Gas Levy,' the government has considered the comments and evidence provided. In the government response section of the GGL from page 48, the government response outlines decisions on the levy design. These decisions include the scope of the levy, as well as the methodology for the per meter point design. The government response sets out the frequency of levy payments and collection of meter point data, and the notice period that suppliers will be given ahead of the first levy collection.

The government response also sets out the government's acknowledgement of the strong representations to launch with a levy based on a volumetric design that were received as part of the consultation. The government is actively considering how to address the current feasibility challenges with implementing a volumetric approach to ensure a transition to a volumetric levy can happen as soon as possible.

The government also sets out its position on the cost control framework to ensure supplier certainty and provide reassurance about levy costs. This includes the government decision to 'backdate' eligible payments for any biomethane injected by registered biomethane participants from the launch of the GGSS in 2021 until Q1 2022/23.

The government's decision on the robust compliance and enforcement package is set out in this response. This includes credit cover, the mutualisation process, and decisions relating to financial penalties, interest rates, and public reporting.

Future Support for Low Carbon Heat: Green Gas Support Scheme

The GGSS is expected to begin in autumn 2021 and be open for applications until autumn 2025. The key aims of the GGSS are to:

- Encourage deployment of new AD biomethane plants in order to increase the proportion of green gas in the gas grid, create jobs and attract investment.
- Ensure value for money.
- Minimise a market hiatus for the biomethane industry.
- Contribute to carbon budgets 4 and 5.

The 'Future Support for Low Carbon Heat' consultation sought views on a number of proposals on the scheme including:

- The structure of the tariff mechanism and eligibility for participants, including interaction with other schemes.
- Environmental criteria, including the position on waste feedstocks and sustainability criteria.
- Views on green gas support in the longer-term, including future mechanisms and support for other types of green gas such as hydrogen.

Having reviewed the consultation responses and evidence, the government response is set out below.

Green Gas

Approach to tiering and plant size

Q1: Do you agree that the tiering structure as outlined above is appropriate and would deliver the best value for money?

Consultation proposal

It was noted in the consultation that the cost of producing biomethane reduces as production increases. To ensure value for money, tariffs should reflect the costs of producing biomethane at different scales.

It was proposed that under the new biomethane support mechanism, tariffs continue to be based on the volume of gas injected into the grid. A three-tier structure was outlined:

- Setting the Tier 1 limit to 60,000 MWh. It was proposed to increase the Tier 1 limit compared to the RHI (40,000MWh), encouraging larger plants that can achieve better economies of scale. In our assessment there should be sufficient food waste to support plants of this size in many geographical areas.
- Setting Tier 2 for the next 40,000 MWh. In some areas, there may be sufficient feedstock to generate greater volumes of biomethane (for example, due to a denser population or waste

feedstock being available as a by-product of other processes such as food and drink production). In these circumstances, we want to incentivise plants to unlock greater economies of scale and continue producing biomethane under the Tier 2 tariff. This would bring the overall allowance under the first two tiers up to 100,000 MWh.

- Introducing a Tier 3 tariff for biomethane production above 100,000 MWh. In rare circumstances where a plant can produce more than 100,000 MWh of biomethane annually and achieve the very greatest economies of scale, it should be encouraged to do so.

Summary of responses

Feedback on the proposed changes from stakeholder workshops and the consultation was positive. 46 out of 85 consultation responses received were supportive of the new tiering structure. The main reason was respondents' support for encouraging economies of scale. Other reasons mentioned were around making biomethane a more attractive investment proposal as well as wanting to encourage efficiency and the tiering structure being familiar to the industry. Among respondents who were unsupportive of the new tiering structure, many focused on wanting to support smaller (as well as bigger) plants.

Government response

We will implement the tiering structure as outlined in the consultation, including increasing the Tier 1 limit to 60,000 MWh. This will encourage larger plants to come online where there are suitable conditions to do so and allow them to take advantage of economies of scale. This in turn will stimulate production of larger volumes of biomethane and increased carbon savings.

Setting the limit for Tier 1 below the 60,000MWh would be unlikely to make a material difference to the market and could result in limited benefits. Conversely, a very high limit (above 60,000MWh) would pose risks to deployment levels due to feedstock and grid capacity constraints, as well as increase risks around feedstock and digestate travelling over longer distances to feed larger plants.

As part of the scheme, we want to promote plants to be sized to suit their individual circumstances and smaller plants are encouraged to apply.

Tariff length

Q2: What are your views on the impact of a 15-year tariff period to support biomethane?

Consultation proposal

Under the Non-Domestic RHI scheme, biomethane plants are supported through a 20-year tariff. In the consultation it was noted that 20-years was deemed an appropriate tariff length to support biomethane production in 2010, as AD was a relatively new technology at that time. Due to the risk involved with the upfront cost of plants, a longer payback period was seen as appropriate to encourage investment.

AD for biomethane production is no longer a novel technology. The biomethane market has developed significantly since the last time tariff length was consulted on. Better understanding of the costs and investment risks means it is now feasible to review whether a more

appropriate tariff payment length can be offered. The new tariff length should reflect the market trends we have seen since the start of the RHI.

It was stated that the tariff period for the GGSS should be shorter than that offered under the RHI, for the reasons set out above. The modelling used for the consultation was based on an indicative 15-year tariff period and we sought views on the impact of that tariff length to support biomethane.

Summary of responses

We received 74 responses to the question regarding a 15-year tariff. Responses were relatively evenly split between supporting and not supporting the 15-year tariff length, and some did not give a position.

Among those respondents who were supportive of the 15-year tariff, there was often little detail provided. Although, a few respondents noted the advantage of avoiding technology lock-in and were concerned that long-term biomethane tariffs would keep the gas grid operating for longer than necessary.

Among those respondents unsupportive of the 15-year tariff length, two concerns were more prominent than others:

- Many believed that this tariff length would not be sufficient to recoup costs and a longer tariff would be needed to encourage investment in biomethane.
- Many respondents feared that plants will stop producing biomethane once the tariff period is over, leading to stranded assets and missed carbon savings.

Q3: 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?

Consultation proposal

Further to the question above, the consultation stated that it was crucial to ensure value for public money and sought to also understand the possibilities of offering a tariff shorter than 15-years.

Summary of responses

Of the 59 respondents, many were against shorter tariff lengths, for example 10-12-years. Only a few of the responses could be considered as broadly supportive of the proposal. The arguments were largely similar to those stated in the previous answer and mostly focused on the lack of investment incentive and the expectation that biomethane would become unattractive to investors. Many thought this would lead to poor or no uptake of the scheme.

Through consultation, as well as dedicated stakeholder workshops on the tariff proposals, other themes have been identified, chiefly around difficulties in accessing suitable financing and the potential for poor quality plants to be deployed if returns are over a shorter period. Both trade associations highlighted it being important that the sector is able to attract long-term investors rather than short-term, high-risk finance in order to drive down the cost of capital over time. This would lead to improved value for money, as well as higher quality plants. They thought this was unlikely to happen with shorter tariffs, which are higher risks.

Government response

The GGSS will support biomethane injection into the gas grid through a 15-year tariff. This strikes the right balance between achieving the key scheme objective of delivering carbon savings, while also ensuring value for money. Compared to the RHI, this shorter tariff length reflects better general understanding amongst the investment community of issues pertinent to the industry such as costs and potential returns, brought about following previous government intervention.

The government recognises industry concerns and agrees that investors and developers need a sufficient payment period to allow them to recover from any construction or commissioning delays and to ensure debt repayments remain manageable. It is also important to attract good quality, long-term investment to the sector to reduce costs. As a result, we will not pursue an even shorter tariff (10 or 12-years).

A 15-year tariff will avoid committing funds further into the future than already committed under the RHI, giving government more options in designing future schemes. Biomethane is a versatile fuel that can be used in heat, transport and electricity production and will be valuable across all decarbonisation pathways. There is therefore little risk of technology lock-in.

Tariff setting

Q4: Do you have any views on the appropriate tariff level, within these ranges?

Consultation proposal

The tariff levels proposed in the consultation were informed by our best understanding of the current costs and revenues of a typical reference biomethane plant. This understanding was modelled on a combination of desk-based research, market intelligence and ongoing engagement with industry, ensuring that there is a robust tariff setting process that is underpinned by detailed evidence on costs. The evidence underpinning the tariff setting methodology was set out in the consultation's impact assessment and will be further explained in the final Impact Assessment relating to this response.

We also consulted on collecting additional cost information as part of the application process, to ensure the tariffs we offer throughout the scheme provide the very best value for money. This is explained in more detail in Question 7. Also related to tariffs, the degression mechanism on the new scheme is discussed in Question 6.

In the consultation, we proposed that the correct tariff for Tier 1 is in the range of 4.9-5.5 p/kWh, Tier 2 is 3.25-3.75 p/kWh and Tier 3 is 1.5-2.0 p/kWh. There is some uncertainty in the evidence used to set these ranges due to variables, such as gate fees and feedstock mix used. These were outlined in the consultation's impact assessment.

Summary of responses

The 55 responses to the proposed ranges were mixed in terms of support. Some of the respondents that implied support for the proposals, suggested that only the top end of the ranges set out in the consultation would be economically viable for a plant. There were a small number of respondents who suggested anywhere in the proposed ranges would be enough to support plants.

However, some respondents suggested that even the top end of the ranges set out in the consultation would not be enough to encourage investment and increased deployment and a number of reasons were offered. A common theme was that tariff settings should be considered alongside the length of tariff: the proposed rates with the proposed tariff length would not be sufficient to re-coupe costs and a longer tariff would be needed to encourage investment in biomethane. One trade association also raised the possibility of government schemes competing with each other, suggesting that the scheme's rates run the risk of becoming a floor price for producers, who can then use the RTFO, as it has better rate of return, therefore suggesting that the tariff rate should be competitive with the RTFO price. A few respondents also said that lower tariffs will leave deployment more exposed to the depression mechanisms. Depressions are address in more detail, including proposals for improving the mechanism currently used on the RHI, in Question 6.

A trade association also noted that the quality of deployment, as well as imminent additional regulatory requirements that would require additional cost, should be considered as well as the quantity of plants deployed. Lower tariffs would incentivise developers to adopt cost cutting measures, resulting in lower standards and plants operating below full capacity.

A few respondents also commented about the inputs into the model used to develop the tariffs, with some suggesting that we narrow the number of variables to exclude things like gates fees, whilst others suggested expanding the list. We noted in our consultation impact assessment and consultation that there is significant uncertainty in some of the inputs that inform our modelling.

Government response

The Government will support biomethane injection through AD, with the following tariff rates for each tier. This, and future rates through subsequent reviews, is subject to changes from external economic variables that are included in tariff modelling (including adjustments for forecasted inflation rates and any changes in gate fees. Once the tariffs are offered through the TG process, the rate is 'locked in' and they will only change for inflation):

Tier 1: 5.51 p/kWh

Tier 2: 3.53 p/kWh

Tier 3: 1.56 p/kWh

Two of the scheme's aims are to increase deployment and ensure value for money. Therefore, there is a balance to be struck between ensuring that support offered through tariff payments is enough to incentivise deployment throughout the scheme, whilst ensuring value for money for the billpayer. Tariff rates that are too high, risk overcompensating producers and overburdening the billpayer, whilst rates that are too low risk decreased deployment, lower standards, and therefore lower contributions to carbon budgets. Both scenarios represent poor value for money.

We recognise that many respondents raised concerns over the level of support offered and agree that incorrectly set rates would place undue pressures on those in industry. We are confident that these tariff rates account for the correct inputs that go into biomethane production from AD and the advances the industry has made in the last decade, whilst also achieving the right balance between meeting scheme aims and not overburdening the billpayer. Further details of how the tariff rates have been calculated

will be set out in the final Impact Assessment, which will be published following the publication of the government response.

Ensuring value for money through tariff changes

Q6: 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?

Consultation proposal

The consultation stated that we want to ensure the GGSS continues to deliver value for money, by providing a means by which tariffs can change to reflect the true costs in industry, without over-restricting growth by making the tariff too low to stimulate investment. The depression mechanism operating under the RHI helps ensure value for money and, alongside TGs, provides investor certainty, through providing enough transparency of future tariffs to enable investment. The biomethane tariff has reduced a number of times, thus increasing value for money when significant new deployment is achieved. However, this has not always worked well for biomethane. For example, the tariff had to be raised in the 2018 regulations due to a hiatus caused by excessive depression.

We proposed to base a future mechanism on the existing RHI depression mechanism, whilst reviewing detailed elements of the mechanism's design to ensure it offers value for money, whilst still incentivising deployment and providing investment certainty. This could include, for example, adjusting the frequency and size of depressions.

Summary of responses

We received 49 responses to this question, and they covered depression, but also the concept of a tariff review and collecting more detailed costing information from applicants.

Depression

Some respondents supported the removal of depression, whilst many implied support for retaining it, but suggested amendments to the existing RHI mechanism. Those suggesting the mechanism was not needed at all often noted the existence of other budget management mechanisms, such as the TG and annual budget caps, suggesting this meant depression was not required, and commonly cited the negative impacts seen from the RHI mechanism raised above.

Many respondents noted negative impacts from the way depression has worked under the RHI. A few respondents noted the adverse effect of "depression window" deadlines (interpreted as TG allocation window deadlines) for commissioning, which led to pressure on gas networks to commission many plants in a short space of time. A view was also expressed that excessive depressions lead to a reduction in deployment and stop-start growth, which impacted on investor confidence. Spikes and troughs in applications and commissioning and deployment were noted.

A few respondents suggested that depression thresholds should be set at a high level or close to the budget caps to mitigate any underspend as a result of a depression that significantly slowed or halted deployment, or that the thresholds should be front-loaded to encourage early deployment and therefore early delivery of benefits. Some respondents suggested that the

proposed tariff ranges are much closer to levels that would not incentivise any new deployment as opposed to providing over-compensation, and therefore potentially just one degression would halt any further deployment. This was highlighted as a key reason to have high thresholds or remove degression altogether.

Some supported a reduction in the level of degression with 5% cited by a few respondents as a possible cap. Some who supported this cited the long build time and the potential benefit from increasing investor confidence. A response noted that if set in regulations as an automatic mechanism, BEIS no longer has control of whether tariffs are set at an appropriate rate. A few respondents also suggested a defined period at the start of the scheme without a degression being able to occur, so as to provide for investor certainty at the outset of the scheme.

Government Response

The degression mechanism on the GGSS scheme will act to prevent the risk of overcompensation for deployment that exceeds forecast expenditure thresholds. Any degression on the GGSS will subsequently occur on a quarterly basis, with announcements made by 15th March, 15th June, 15th September, and 15th December of each year. The annual tariff review will coincide with the September degression announcement, taking account of any degression that may occur.

Learning from the impact of the RHI degression process on Biomethane plants, we have revised the degression process for the GGSS. This will account for the relatively lower volumes of biomethane applications on the scheme and the relatively higher cost of those plants, when compared to the technologies and degression process on the RHI. Degressions on the RHI had previously been triggered where deployment had breached thresholds, only for the number of new plants to drop again, requiring the tariff to be reset. We will adjust the degression triggers to mitigate this dynamic, setting the thresholds for forecast expenditure to avoid over-compensation and removing the growth trigger. Subsequently, degression will simply occur against a forecast expenditure trigger, and not on quarter-to-quarter growth, above percentage growth thresholds as it does on the RHI. This degression process will better match the likely profile of biomethane deployment that we can expect to see on the scheme, whilst continuing to ensure value for money by responding to unexpected surges in deployment, indicating potentially higher returns or lower risks for industry. Finally, because degression depends on being able to review previous scheme performance, tariffs are unable to degress in the first 6 months of the scheme so a separate budget cap will be included to cover this period to ensure effective budget management (see Question 36).

Degression thresholds will be published outside of the regulations in a document before launch of the scheme. Publishing the degression thresholds separately to the regulations will enable the tariff review process to be more dynamic, responding and adjusting to costs without requiring a legislative change to the regulations, that would take time and cause difficulty with the management of tariffs.

In the relatively unlikely event that unforeseen developments in the cost of biomethane leads to a spike in deployment, a degression will need to act firmly on the tariff. Subsequently, there will be a 10% degression level on the tariff if expenditure thresholds are breached.

Q5: 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 GGSS could be required to provide?

Q7: Do you have further suggestions, beyond those mentioned in this consultation, which would help the GGSS to deliver the best possible value for money?

Consultation proposal

We provided further information on this section of the Consultation through the "[Green Gas: Ensuring value for money through tariff changes – more detail](#)" on 29 May 2020, requesting more detailed costing information from scheme applicants and a proposed tariff review mechanism.

We proposed to request more detailed costing information from scheme applicants than is currently collected under the RHI, including figures for a small (c. 5-10) number of generic line items within each of the 3 categories of upfront capital plant costs, ongoing operational costs, and non-tariff revenue. We proposed that this could provide an evidence base for future policy on longer term support for green gas (post-GGSS), and potentially be used in a tariff review process during the life of the GGSS. We proposed to collect this information (forecast or actuals, as appropriate) at the application stage and potentially for participants to provide it on an ongoing basis, for example annually, with the intention of avoiding any significant administrative burden. In line with current cost collection under the RHI, we envisaged that submitted information would only ever be published in anonymised and aggregate form.

We also proposed that a tariff review mechanism could provide a way to adjust tariffs during the life of the scheme, by changing the tariffs offered for new applicants (those who have successfully applied for TGs would be unaffected). A tariff review could be determined by significant or unexpected cost changes in industry. We proposed that a review could be conducted annually or as a single review point midway through the scheme. And that it could be mechanistic and based on defined rules set out in regulations (as with the RHI's depression mechanism) or a manual review process which would include consultation at the time of it happening.

Summary of responses

There were 51 responses to question 5 and 53 responses to question 7. The responses to these questions significantly overlapped and covered similar themes and are summarised together below.

Collecting more detailed costing information

Respondents who addressed the collection of more information on costs and revenues from scheme participants were supportive. They noted the benefit that this will help further build the evidence base for support in the future and ensure value for money when setting tariffs.

However, respondents also expressed the opinion that doing so must not put an undue administrative burden on participants in the scheme. Responses to this covered both how the process is administered and the level of granularity of costing information that was collected. A few respondents also highlighted the potential challenge of standardising and aggregating cost line items due to a lack of standardisation within the AD industry.

A few respondents made clear their view that the data collected should be anonymised and only used to help set tariffs for the future, not retrospectively used to adjust tariffs for a live project, for example.

Tariff Review - Responses to question 6

Some respondents supported an annual tariff review, and a few suggested a mid-point review would be more appropriate, whilst some supported a tariff review but did not indicate a preference on frequency. Benefits of an annual review included avoiding a significant peak in demand before a mid-point review, whereas a respondent suggested a mid-point review fitted better as evidence of the scheme's impact may be limited in the first year and few new applications could expect to be seen in the final 12-months of the scheme.

Some respondents suggested that the tariff review could assess any significant changes in costs associated with producing biomethane and wider policy changes; for example, the impact of Defra food waste policy or any potential changes to propanation requirements.

There was no support for a mechanistic review, with respondents instead supporting a manual review process, and a BEIS value judgement, taking into account industry views and evidence.

Some respondents supported both degression and a tariff review, whilst some supported removing degression and just having a tariff review.

Tariff Review - Responses to questions 5 and 7

A few respondents highlighted the potential benefits of a tariff review mechanism to adjust future tariffs offered. Suggestions on what it should review included capital required and cost of plants. Feedback received through stakeholder workshops supported the concept of a tariff review.

No direct feedback was received to this question from respondents on whether an annual or mid-point review would be preferred, though some respondents to question 6 suggested an annual review, with a few proposing a mid-point review as most appropriate. Feedback received through stakeholder workshops suggested either could be appropriate, with a preference expressed for it in place of degression and a clear preference for a manual review process over something mechanistic.

Other suggestions

A few respondents suggested including a form of carbon pricing alongside the scheme or instead basing tariffs on a whole lifecycle assessment of carbon emissions and savings from a plant, varying the tariff offered by carbon intensity of the biomethane produced. Others suggested introducing tariff premiums for use of technology that leads to greater carbon savings, such as more expensive methane leakage mitigation or use of bio-propane in place of fossil propane.

Other suggestions included:

- valuing storage of biomethane to help specifically meet peak demand;
- supporting revenue streams for biomethane plants such as stimulating the demand for digestate (further detail on this was requested in question 13) or certificates associated with Guarantees of Origin (further detail on this was received in question 10);

- allowing a hub and spoke or ‘virtual pipeline’ model, where multiple plants inject into one injection point. Though road haulage associated with this was separately raised as a concern (further responses were received regarding this point in question 18);
- allowing expansion of RHI-supported plants under the new scheme (more detail was received in response to question 16);
- supporting other technologies such as biogas combustion or bio-SNG from gasification, or Hydrogen (further detail was received in response to questions 20 and 21 and 39);
- minimising risk for investors through changes to commissioning deadlines and limiting cases where rules change or the administrator’s interpretation of rules changes.

Government response

Collecting more detailed cost information from applicants

In order to further build our evidence-base on costs in the biomethane industry, we will collect more detailed information on plant construction costs from applicants than is currently done under the RHI. This is expected to be used in the annual tariff reviews and to inform any future policy for biomethane or AD support. Stage 3 of the TG application process, at full registration, will require the submission of a defined set of capital construction costs incurred in construction of the plant associated with the application. We recognise the challenges in non-standardisation of assigning costs and guidance will be available covering how costs should be allocated. As occurs on the RHI in the provision of evidence demonstrating financial close at Stage 2 of a TG application, the information will need to be audited by an independent auditor in accordance with any guidance published.

We recognise the difficulty inherent in collecting evidence on ongoing operational costs and revenues from applicants due to timing challenges and ramp-up uncertainties, and so we will not collect information on these at scheme launch. We will explore the possibility of introducing collection of this information at a later date.

As with information collected under the RHI, this information will only ever be published in an anonymised and aggregate form.

Annual Tariff Review

We will introduce an annual tariff review into the scheme, as the primary mechanism to amend the tariffs offered to new applicants, in order to ensure the scheme continues to meet its objectives and consistently delivers value for money. We will also consider whether the review could interact with other parts of the scheme, for example amendments to the degression mechanism. The outcome of the tariff review will be to either lower, raise or not alter the level of the tariffs offered to new applicants to the scheme (any applicants issued with a TG will be protected from future tariff changes).

The following evidence will be assessed in the process of the annual tariff review:

- Plant construction cost information collected from participants in the GGSS;
- Other evidence collected through ongoing BEIS market intelligence and analysis work, including evidence on plant costs and revenues, including finance costs and required rates of return;

- Cost impact of changes from other government policies;
- Deployment rates incentivised through the scheme to date, which indicate if tariffs are aligned with costs in industry;
- Responses received from industry stakeholders to a published call for evidence.

The outcome of the tariff review will be announced each year by a date set in the regulations, to occur in autumn 2022, 2023 and 2024. As with tariff changes announced as a result of the degression mechanism, there will be a period of one month's notice before any updated tariffs take effect.

The government recognises the potential benefits of several of the suggestions raised, such as setting tariffs based on the carbon intensity of biomethane produced or a whole lifecycle assessment of the carbon abatement from a biomethane plant. However, this represents a significant change to the tariff structure of payments proposed and we do not have evidence available or a standardised assessment methodology to set tariffs in this way. The government will work with the industry to assess the feasibility of including this in a future support mechanism (see Questions 20 and 21 on page 39).

Tariff guarantees

Q8: Do you agree with the proposals for tariff guarantees for biomethane? How could this be improved?

Consultation proposal

TGs were introduced onto the RHI in 2018 (for full information, see Ofgem Guide to tariff guarantees⁴), and provide investment certainty. These have proven popular, with 60 TGs granted by the end of January 2020, 31 of which were for biomethane plants.⁵

In the consultation, we proposed to replicate the RHI TG mechanism in the new scheme, with some minor changes, with the aim of improving deployment and reducing administrative burden. Those were:

- Introduce an additional stage 2a, where biomethane producers are required to inform the Administrator when construction commences. The intent is to avoid unnecessary degressions being triggered for biomethane TGs that are then not built.
- Make TGs a compulsory stage in accessing the scheme, since we expect all biomethane producers would choose this route, and it enables better management of the overall budget.
- Make the end of the TG commissioning window align with the end of the GGSS, helping applicants to better manage deadlines.
- Review deadlines for each stage to learn from experience on the RHI, and ensure they are fit for purpose for the biomethane sector.

Summary of responses

⁴ Ofgem (2020) [Tariff Guarantee applications](#)

⁵ BEIS (2020) [Renewable Heat Incentive Deployment Statistics](#), table 1.6

Of the 62 responses, most respondents indicated support for the proposals, with more than half of those suggesting the proposals for TGs would improve investor confidence.

Tariff Guarantee Stage 2a

A few respondents supported the proposed introduction of an extra stage in the TG application process. Respondents indicated they appreciated the need to avoid unnecessary degressions. However, there were also some strong reservations around including more deadlines in an application process that already has many, often tight, timelines. There was further concern that additional deadlines could lead to further delays in development as they seek to remedy issues with their application.

Concerns were also raised around the impact of additional administration that could be incurred with a further stage. For example, requiring the developer to give notice and provide evidence that construction has started could place further strain on both the developer and Ofgem.

Further investigation with stakeholders as well as Ofgem also revealed a number of issues in how this proposal might work in practice, such as the complexity in defining “construction.” It was felt that there were other ways in which the application process could minimize the risk of plants stalling or being delayed after financial close and that another stage in the process would not further minimize that risk. On further analysis, we do not believe that unnecessary degressions have been caused on the RHI solely due to plants with TGs failing to commission after financial close.

Making tariff guarantees compulsory

Feedback in the consultation registered no objection to this proposal and there was more explicit positive feedback in the June stakeholder workshops. Ofgem has also indicated that having only one application route would make for a more streamlined application process. There are also signs that TGs are becoming normalised as part of the process for securing investment, which indicates the investor market is becoming used to them.

Commissioning window

On the RHI, commissioning deadlines have a 183-day grace period to mitigate for unforeseen circumstances, but developers also have to meet hard deadlines set out in regulations, whichever is soonest. We have heard from respondents that the latter is highly problematic as it can lead to developers rushing to meet them, potentially impacting on the plant’s quality, whilst winter deadlines can have logistical building issues. We have also heard from gas suppliers that producers rushing to commission can put pressure on them, see more detail in Question 6 in the GGSS section.

Deadlines

Two clear themes emerged from the consultation around the issue of deadlines. Firstly, respondents indicated that deadlines themselves can be problematic, as they can be missed for legitimate and unforeseen reasons. We have also heard from industry that more flexibility for deadlines would be advantageous.

Secondly, responses to the consultation highlighted concerns about the term ‘commission,’ as biomethane production from AD is not uniform across the industry and its use could cause uncertainty about the timing of registrations onto the scheme.

Government response

Introduction of Stage 2a

Given the lack of clarity around the root cause of depressions and how the proposal of another stage in the application would add value, as well as the amendments to the depression mechanism (as outlined above), we have decided not to pursue this proposal and continue broadly with the application process currently used on the RHI. However, we note that improvements could be made elsewhere and will work with industry and Ofgem on potential amendments to the application process and associated guidance.

Making tariff guarantees compulsory

Given the popularity of TGs within the biomethane industry, the certainty they provide to investors and the benefit of having a single route onto the scheme in terms of streamlining the application process, we will proceed with this proposal. TGs also act as an effective budget management tool for BEIS and making them compulsory has significant advantages for managing the scheme budget as we will have a better understanding of potential spend. This will be particularly helpful for enabling a more accurate levy rate setting process. Applicants will be expected to comply fully with Ofgem's requests for information throughout the application process and in the event of any right to review request (compliance will also be applicable to existing participants who have requested a review). It is in the interest of applications and participants to comply fully and in a timely way, as failure to do so could have implications on the success of the application process or continued participation, and will ensure the process can run as smoothly as possible.

Commissioning window

Given the incentives already in the system for developers to commission promptly and the concern around hard deadlines from industry, we will proceed with this proposal, with one commissioning window aligned with the end of the scheme. Applicants will be required to be commissioned by the deadline nominated in their TG application (with a 183-day grace period carried over from the RHI) or by the end of the scheme, whichever is sooner. We expect applicants to be realistic and timely in their nominated date as they will not be eligible for payment until they are commissioned. In addition, there will be annual TG budget caps as a budget control mechanism which, if met, will mean temporary closure of the scheme until the next financial year or allocation becomes available (see Question 36).

Deadlines

We recognise the difficulties industry face with tight deadlines, for example the 3-week window between Stage 1 and 2. However, these are crucial to the robustness of forecasting necessary for budget management, and it is unclear what impact an amendment could have on the application process overall. Therefore, we will retain the 3-week window, but continue to monitor the application process once the scheme opens, with a view to extending that deadline if there is a genuine need.

Industry has raised concerns that the definition of 'commissioned' can cause uncertainty for biomethane producers registering on the RHI, so we will update the definition of 'commission' in the scheme regulations to provide further clarity as well as the

requirement to provide further evidence that a plant has 'commissioned.' We do not expect this to add significant administrative burden to either Ofgem or participant.

Feedstock requirements and sustainability

Q9: What are your views on increasing the minimum percentage of waste feedstocks above 50%, now or in the future? What could be a suitable new threshold?

Consultation proposal

The consultation proposed that waste derived feedstocks offer significant carbon savings when compared with other feedstocks, such as energy crops. Diverting food waste from landfill to AD can provide high carbon savings, and also helps to support a more circular economy and contributes to England meeting its target to work towards eliminating food waste to landfill by 2030 and to recycle 65% of municipal waste by 2035. Under the Non-Domestic RHI, applicants must generate at least 50% of their biomethane from waste or residue feedstock to receive RHI payments. This requirement was introduced in the 2018 reforms to maximise the carbon cost effectiveness of the scheme.

The consultation also indicated previous industry feedback which suggested that energy crops have practical importance for many biomethane producers by providing a stable feedstock supply when waste supply fluctuates, particularly with uncertainty in gate fees and waste contracts. In view of the greater environmental benefits from using wastes rather than energy crops in AD, we are keen to promote the use of waste feedstocks, while ensuring continued investment and deployment. We asked respondents to the consultation for their views on increasing the minimum percentage of waste and residue feedstocks above 50%. We were particularly interested in whether the biomethane industry would be able to meet a higher threshold, given wider government policies coming into effect, such as Defra's requirements that every household and business in England have a separate collection for food waste from 2023.

Summary of responses

We received 73 responses to this question which encompassed a wide range of views, with no clear consensus. Some respondents were supportive of increasing the waste feedstock threshold above 50%. These respondents were commonly from local authorities/public administration bodies and the environmental sector. Some AD industry stakeholders also supported an increase, but often requested amendments to other aspects of the scheme in the case of an increase, such as amendments to how feedstock types are defined, or requests for a higher tariff. Respondents that were supportive of an increase ranged from suggesting a marginal increase to 55%, to some suggesting the GGSS should only support 100% waste biomethane. Most respondents who were supportive of increasing the waste feedstock threshold did not indicate what their preferred threshold would be. There were some responses which were against increasing the waste feedstock threshold, with many of those opposed suggesting it should stay at 50%, and a few responses arguing for a lower threshold. Most of these responses were from members of the AD industry. 15 responses did not express a clear preference.

We also received 517 responses as part of a campaign coordinated by Biofuelwatch, which suggested that the GGSS should not provide subsidies for any non-waste feedstocks. Most of these responses were identical, however some responses did provide some additional

information, which is included below in the reasons given for supporting an increase to the threshold. For analytical purposes, these responses have been counted as one response.

The most frequently cited reason for supporting an increase to the waste feedstock threshold was around discouraging the use of energy crops, highlighting environmental concerns for the use of this feedstock including: carbon savings; impact on food security; biodiversity loss; taking up space that could be used for green space, afforestation or renewable technologies such as solar; emissions from indirect land use change; and soil health. Some respondents also suggested that a higher waste feedstock threshold would be in line with increased food waste collection as a result of other government policies.

Reasons given for not supporting an increase to the waste feedstock threshold were varied. Respondents noted that because of a lack of available food waste and inconsistency in supply, a higher threshold could have a negative impact on deployment as it would be a riskier investment, and more competition for food waste could further decrease gate fees which are a source of income for biomethane producers. Some respondents were concerned that existing plants could be outcompeted by newer plants who would be better able to accommodate the lower gate fees. Respondents also highlighted concerns that a higher threshold could lead to an unintended consequence of food waste being transported long distances. While respondents were very supportive of Defra's policies to increase the collection of food waste in England, they noted that this requirement will not be in place until mid-way through the scheme, suggesting that an increase to the threshold from the start of the scheme would be premature due to the lack of available food waste. Respondents also suggested that crops used in AD can have wider benefits, such as: balancing unstable food waste feedstocks; balancing end-product nitrogen content in high nitrogen feedstocks such as poultry manure; broader environmental benefits when grown as part of a sustainable crop rotation regime. Other reasons given for opposing an increase to the waste feedstock threshold include the particularly negative impact it could have on rural plants who often operate close to the 50% threshold, and the higher costs and expertise associated with processing wastes compared to other feedstocks.

Some respondents also highlighted some additional considerations around the waste feedstock percentage threshold which are not specific impacts of increasing the threshold. These included some suggestions that feedstocks should be classified according to their greenhouse gas emissions or sustainability benefits, rather than their product status. Additionally, some respondents raised concerns about the interaction with the RTFO and their definition of waste feedstocks.

Government response

The Government will require 50% of all biomethane (by energy content) to be produced using waste or residue feedstocks in the GGSS, in line with current RHI rules known as feedstock restrictions. We recognise the importance and benefits of encouraging the use of waste and residues over other feedstock types. However, we are mindful of the potential negative impacts that a higher threshold could have on plant deployment and unintended competition within the AD industry, given uncertainty around volumes of food waste available for AD at the start of the GGSS.

The government will undertake a mid-scheme (when the scheme is open to applications) review of the waste feedstock threshold. At this point we will consider how the wider food

waste environment and AD industry has changed since the scheme's start. Taking into account the actual percentage of waste feedstocks in operations and the support for an increase, we would be minded to increase the waste feedstock threshold in future as appropriate.

Q10: 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 GGSS?

Consultation proposal

The consultation outlined the importance of having robust sustainability criteria in the GGSS. The RHI sustainability criteria are currently aligned with the Renewable Energy Directive (RED). We outlined our intention to broadly reflect these criteria in the GGSS, including any outcomes of "The Non-Domestic Renewable Heat Incentive – Ensuring a Sustainable Scheme" consultation on management of fossil fuel contamination in AD. The RED has been recast to 2030 (REDII). Among other changes, the REDII introduces sustainability criteria for forestry feedstocks, as well as greenhouse gas criteria for solid and gaseous biomass fuels. We asked respondents for their views on whether we should look to adopt some of the additions included in REDII in the GGSS sustainability criteria.

Summary of responses

We received 52 responses to this question. Many respondents were in favour of REDII compatible sustainability criteria in the GGSS, some expressed no clear opinion, and one respondent was against this. Many of the supportive respondents gave no additional detail other than that they supported alignment. The main reasons which were given in favour of adopting REDII compatible criteria were around ensuring biomethane produced under the GGSS meets the highest environmental standards. Respondents were generally keen that the GGSS should promote the use of feedstocks with the highest carbon savings and the lowest environmental impact, highlighting that alignment with particular aspects of REDII would do this.

Support was particularly high for adopting REDII compatible greenhouse gas emissions criteria, which would involve biomethane producers meeting a 70% greenhouse gas saving rather than 60%. In several responses, support for this change was conditional on the GGSS also adopting a REDII compatible greenhouse gas calculations methodology to account for the averaging of emissions across consignments.

A few respondents stated that the Government should align scheme sustainability criteria with the Renewable Transport Fuel Obligation (RTFO) criteria to allow for a smooth interaction between the schemes. Respondents also suggested that adopting REDII compatible criteria could be beneficial for trade in the EU, with particular reference to the implementation of Guarantees of Origin within the GGSS.

Government response

The Government will not be requiring gas Guarantees of Origin for the GGSS. The current market for certificates is not very liquid and there is limited price transparency. We understand that demand from suppliers of green gas and transportation users has pushed prices up over recent years. However, anecdotal evidence from industry suggests

that prices are still too low and too volatile to materially impact investment decisions at the moment. Not having a REDII compliant scheme means that UK plants will not be able to sell green gas certificates to EU buyers. However, it is not clear what the demand and supply balance is between the UK and the EU for certificates. We also do not know where new demand will arise. While prices have increased over recent years to provide additional revenue for plants, this has been partly offset by falls in natural gas prices. The Government will continue to monitor the market.

The GGSS criteria on greenhouse gas savings and the methodology to calculate this will be compatible with REDII provisions. Biomethane producers will be required to meet a greenhouse gas emissions saving threshold of 70%, which means that biomethane will meet the greenhouse gas criteria if the lifecycle greenhouse gas emissions associated with each consignment of that biomethane are less than or equal to 24g of CO₂ equivalent per MJ of biomethane injected.⁶ This compares to 34.8g CO₂ equivalent in the RHI. Participants will be able to calculate the greenhouse gas emissions using either the default value or actual value methodologies outlined in REDII. Among other changes, the methodology in REDII allows the averaging of emissions across feedstock consignments and accounts for covers on digestate stores. This aligns with the views from the consultation responses and will help ensure the biomethane produced meets high environmental standards. We will be requiring biomethane producers to submit greenhouse gas emissions savings criteria as part of their annual sustainability audit.

In line with the government response to 'The Non-Domestic Renewable Heat Incentive: Ensuring a sustainable scheme' consultation,⁷ the government will introduce provisions on the use of fossil derived fuel in biomethane. This will ensure accurate measuring of carbon savings. The provisions will mean that payment will be deducted for the percentage fossil-derived fuel contamination, and this will be applied to the fuel. The periodic support payment will be reduced pro rata to reflect the percentage of the energy content from the fossil fuel component of the feedstock used by the participant in the relevant quarterly period. It will be the participant's responsibility to provide evidence for the energy content of the biomethane that is derived from fossil fuel. Wastes consistent with Ofgem's sustainability assessment will continue to be permitted, which will help prevent the loss of feedstocks and disruption to circular economy options.

Any other sustainability criteria will be aligned with the RHI requirements for biomethane.

Q11: Do you have any views on how the feedstock reporting process for biomethane should be amended compared to the existing RHI requirements?

Consultation proposal

The consultation noted market intelligence suggesting that the annual self-reporting process can be burdensome for applicants and indicated that we would consider amending the feedstock process for biomethane on the GGSS, dependent on consultation feedback. We asked respondents if they had any views on whether the feedstock reporting process should be amended.

Summary of responses

⁶ Note MJ = megajoule(s)

⁷ BEIS (2020) [The Non-Domestic Renewable Heat Incentive: Ensuring a sustainable scheme](#)

We received 35 responses to this question. Many respondents stressed the importance of having a reporting system in place but had no additional views on how it should change compared to the ND RHI. 5 respondents had no suggestions for improvements and stated that the reporting process should be the same as the RHI.

Respondents commented on the current feedstock reporting system under the RHI both positively and negatively. Positive comments suggested it is fit for purpose and suitable for the task. However, other respondents were more critical of the current system, suggesting the process to approve feedstocks can be slow and lengthy, discouraging the use of novel feedstocks and creating an administrative burden for participants.

Suggestions for the feedstock reporting process for the GGSS were varied. Some respondents suggested Ofgem's system could be replaced by an independent industry scheme to accredit feedstocks. However, most respondents were content with Ofgem's Fuel Measurement and Sampling (FMS) procedure but made suggestions of how it could be streamlined or improved for use. The most common suggestions for improvements were aimed at making the FMS procedure quicker to encourage the use of short-term waste opportunities. These included a suggestion for Ofgem to publish a list of pre-approved feedstocks, and a suggestion to allow alternative rules for low quantity feedstocks (i.e. less than 5% of the feedstock mix) which would mean they would not have to go through the FMS procedure.

There were a couple of minor suggestions made by only one or two respondents, which included reporting of feedstock contamination and reporting waste transport miles. There was also one concern about the complexity of greenhouse gas calculations, and one suggestion to combine the FMS system with the energy output/payment system. More widely, there were requests for more guidance from Ofgem on the classification of feedstocks.

Government response

The Government will be keeping the feedstock reporting process on the GGSS the same as that for biomethane under the non-domestic RHI. We recognise the merits of amending aspects of the FMS procedure to encourage the use of novel and short-term waste feedstocks. However, biomethane feedstocks must be approved on a case-by-case basis to fulfil sustainability requirements as their use is specific to each plant. Therefore, publishing a list of pre-approved feedstocks or allowing different rules for low-quantity feedstocks could lead to non-compliance and gaming issues.

We will be including provisions in the regulations for the GGSS, which would allow for BEIS in the future to approve a scheme for listing sustainable fuels within the GGSS if it is deemed to sufficiently comply with the criteria outlined in the scheme regulations. No such scheme currently exists that is suitable for feedstocks used in biomethane.

Q12: What measures and technologies exist for reducing ammonia emissions from digestate and what are the barriers to their widespread deployment?

Consultation proposal

Digestate is a nutrient rich by-product from AD that can be used as a fertiliser, which releases ammonia when stored or spread on land. Ammonia is an air pollutant that has negative impacts on human health and the environment. Defra's Clean Air Strategy is committed to introducing legislation, to require digestate in England to be spread using low-emission spreading equipment by 2025, and digestate stores to be covered by 2027, in addition to other

action. However, increasing the volume of digestate produced as a result of the GGSS would make it more challenging to meet England's legally binding ammonia reduction targets. In the consultation we outlined that further action is needed to reduce the impact of digestate on air quality, and asked respondents to outline the measures and technologies they know of which can reduce ammonia emissions from digestate, and what the barriers to their widespread deployment are.

Summary of responses

We received 36 responses to this question. The responses identified three main ways to reduce ammonia emissions from digestate: storage and covers; low emission spreading equipment; and techniques and technologies for stabilising or reducing nitrogen in the digestate itself. The most significant barrier identified was costs of the technologies available for producers, as well as the cost of storage and spreading for farmers.

Identified measures and technologies for storage and covers of digestate before it is spread on fields included impermeable covers, crusts, granular, particulate and purpose made floating layers and fixed structural lids. Such covering prevents a proportion of this ammonia being released. As highlighted above, costs are the main barrier to these measures, however they are currently widely used.

Low emission spreading can be achieved in a variety of ways using trailing hose, trailing shoe, shallow injection, or deep injection equipment. These technologies/techniques reduce the amount of ammonia released and increase the amount of effective nitrogen in the ground. As with storage and covers, cost is a key barrier to use, as well as a lack of awareness amongst the farming community and a lack of regulation.

A number of technologies that can reduce ammonia loss from digestate have been identified through the consultation and further engagement across industry. Technologies include acidification whilst in storage, pelletisation, and drying digestate. However, upon further investigation, many of the available technologies have yet to reach full commerciality. This has two crucial consequences. Firstly, it means there is very little costing information on which to devise robust policy. Without this, it is very difficult to assess its impact on value for money for the billpayer. Secondly, the immaturity of these technologies at commercial stage means that there is no scalable track record for investors to assess when making investment decisions.

Q13: What are the reasons for the lack of commercial demand for digestate and how can the market for digestate be strengthened?

Consultation proposal

The consultation highlighted industry feedback which suggested that there is currently limited commercial demand for digestate, reducing a potential revenue stream and leading to the disposal of digestate as a waste. We asked respondents to outline the reasons for the lack of demand for digestate, and how the market for digestate could be strengthened.

In December 2020, we launched the “Green Gas Support Scheme: Digestate management” consultation, where we asked for further views on separate proposals on digestate management:

1. Requiring digestate stores to be covered via the requisite waste permit.
2. When spreading digestate, participants should ensure it is spread using low emission spreading techniques.

Summary of responses

We received 38 responses to this question. Respondents identified two key themes regarding reasons for the lack of commercial demand for digestate: barriers to the use of digestate by farmers, and end of waste rules. Respondents suggested that barriers to farmers include the cost of spreading and storage equipment, quality of digestate including plastic pollution, lack of awareness or confidence in the benefits of using digestate, narrow spreading season, transporting the digestate and limited supply. The responses also suggested that the existing end of waste rules can create barriers to the use of digestate in other markets such as horticulture. In addition, respondents indicated that the end of waste rules can prevent additional processing of digestate, which would reduce its associated ammonia emissions, such as drying or ammonia stripping.

Suggestions for how to strengthen the market for digestate included raising awareness amongst farming communities of the benefits of using digestate over traditional fertilisers, or making using digestate more advantageous for farmers. A few respondents suggested that paying farmers a type of renewable fertilisation obligation could help encourage this. Other respondents suggested ensuring all AD plants are built with covered digestate storage. A few respondents suggested the market for digestate could be strengthened if the end of waste rules were amended to allow additional processing and use in the horticultural market. Improving the quality of the digestate was also suggested as a way to improve the demand for it, with suggestions to more strictly control the inputs by taking steps to reduce plastic contamination, and proving targeted innovation funding for ammonia reduction technologies.

We also consulted separately through the “Green Gas Support Scheme: Digestate management” consultation released in December 2020⁸ on how ammonia emissions can be mitigated by scheme participants, proposing that all participants will be required to hold the requisite waste permit requiring them to cover digestate stores and that they must spread digestate on land using low emission spreading techniques, either themselves or through a contractor. 16 of the 20 respondents supported the proposals but did convey some concerns. The key concern was that any regulatory requirements should not be so prescriptive that it

⁸ BEIS (2021) [Green Gas Support Scheme: Digestate management](#)

stifles innovation in ammonia reduction, be overly burdensome to participants or prohibit them from adopting other, more effective measures. We also proposed a study into other ammonia emission reduction technologies, which received some strong support and offers to help, which are greatly appreciated.

Government response

Mitigating environmental impacts from AD is important for a variety of reasons relating to human health and the environment. Ammonia emissions contribute to air pollution because they can convert to particulate matter, which is the most harmful pollutant to health. Ammonia emissions also damage the environment, reducing biodiversity in sensitive habitats. Government is bringing forward a range of actions to reduce ammonia emissions, as set out in the Clean Air Strategy. Additionally, when not applied carefully and in line with soil and crop need, digestate can cause pollution to water courses through run-off and leaching of nutrients in the digestate, potentially damaging local ecosystems and habitats.

Outlined below is our approach to the three main options for mitigating ammonia emissions. Outside of these requirements, we expect all AD operators to be doing everything commercially viable to mitigate environmental impacts. We anticipate that environmental rules around ammonia emissions will tighten over time and expect the AD industry to comply with these. We will continue to work with Defra and industry to identify and develop ways to improve the market for digestate.

Storage and covers: The Environment Agency is currently updating permitting regulations that will mean by the time the scheme is open, all new AD plants under these regulations in England on the scheme will be required to cover stores, which will prevent a proportion of ammonia being released. Ofgem already require proof of the permit on the RHI (or proof of why a plant should be exempted) and this will continue on the GGSS. The GGSS will not make any requirements for the retrofitting of cover unless required by updated Environment legislation.

Digestate spreading: It is estimated that 93% of the AD industry already use low emission spreading as part of normal operations. To capture the producers who do not, we have identified two scenarios through which digestate is spread and will be including the following requirements in regulations to ensure low-emission spreading is used in all scenarios.

- 1) Digestate is spread using low emission spreading techniques as defined in the Code of Good Agricultural Practice⁹ for reducing ammonia emissions;
- 2) Where the participant contracts with another person to spread the digestate, that person complies with the National Association of Agricultural Contractors (NAAC) standards or equivalent.

Participants will be required to formally declare to Ofgem that they are complying with one of the above during their participation.

Ammonia reduction technology: Due to the barriers to deploying ammonia reduction technology outlined in the summary of responses above, there is very little costing

⁹ Code of Good Agricultural Practice for reducing ammonia emissions:
<https://www.gov.uk/government/publications/code-of-good-agricultural-practice-for-reducing-ammonia-emissions>

information on these technologies available meaning it cannot be included as a GGSS requirement at this stage. BEIS will commit to funding a technoeconomic study into ammonia reduction technologies which will inform a mid-scheme review of this aspect of the policy. If appropriate cost information and ammonia mitigation potential is available as a result of this study or subsequently, which can inform robust policymaking, we will amend the scheme to require the use of such technologies for new participants.

Q14: Do you agree with the proposal not to include an additional capacity mechanism within the GGSS?

Consultation proposal

The consultation outlined that additional capacity is any biomethane produced that exceeds the maximum initial capacity agreed between the network and the producer when the producer originally registered to inject biomethane to the grid. Existing biomethane producers who receive payments under the RHI can currently apply to receive payments for any additional capacity they inject into the gas grid. This mechanism has allowed biomethane producers, who initially sized their plants sub-optimally, to inject more biomethane into the gas grid, leading to greater carbon savings.

The consultation noted that fewer than 10 RHI registered biomethane producers have applied for additional capacity during the scheme's lifetime. It was further noted that the tiering arrangements proposed for biomethane under the GGSS should reduce biomethane producers' need for additional capacity payments, as it is designed to encourage larger AD biomethane plants from the outset.

As a result, it was proposed not to include a mechanism for additional capacity payments in the GGSS.

Summary of responses

Stakeholder feedback received through dedicated workshops indicated that industry's preferred position was to allow for plant expansion as part of the GGSS. Support for the consultation proposal was fairly evenly split in the responses we received: 24 in support and 28 unsupportive. Those that were supportive suggested the new tiering structure made additional capacity unnecessary.

Those speaking for additional capacity listed a variety of reasons, most frequently around the added flexibility such a mechanism could allow if plant or wider circumstances were to change. Examples given were changes in feedstock or grid availability. Respondents also largely agreed that additional capacity could offer cost-effective emissions abatement (offering much better value for money than the same producer building a new plant). Finally, some respondents raised concerns around producers being encouraged to 'reserve' grid capacity and producing, at least originally, below it. Few noted that this occurs already under the RHI and that it can lead to lower than expected production and reduces the number of plants that could benefit from the scheme in a certain area.

Government response

Having re-evaluated available evidence and reviewed stakeholder feedback, we will allow additional capacity for the GGSS. We are committed to encouraging cost-effective biomethane production and are keen to facilitate plant expansion where there is industry

interest in doing so. Only existing GGSS participants will be eligible to apply, they can only while the scheme is open for applications, from autumn 2021 – autumn 2025, and additional capacity must be in operation by the end of the scheme in autumn 2025.

We noted the feedback received about the complex process for applying for additional capacity under the ND RHI and will look to streamline the application process for the GGSS, for example by removing the requirement for overproducing biomethane prior to making an additional capacity application. Applicants will still be required to apply so that BEIS can manage the budget effectively, however we will work with Ofgem to rationalise the process so the same information from the original application process is not processed twice. We intend for any changes to lead to increased interest in plant expansion and minimise efforts on the part of the applicant as well as the administrator.

To ensure that there are funds available for increased biomethane injection due to additional capacity, we will impose a lead time through the additional capacity process which will be dictated by the levy rate setting rhythm each year. The application process will include clear deadlines that will ensure relevant applications can be incorporated into the levy rate setting cycle. If participants submit their additional capacity application after the deadline, they will not receive payments for this until the following year to allow time for the levy rate to be set to incorporate support for this additional biomethane.

Q15: Do you have any views on how a change of scheme participant mechanism may differ in the GGSS to the RHI?

Consultation proposal

There are instances where biomethane plants are bought or sold for a variety of business reasons. In the consultation it was proposed to allow changes of scheme participants where there are appropriate reasons to do so. In order to inform how a suitable mechanism may be designed we sought views on how the change of scheme participant may differ in the GGSS to the RHI.

Summary of responses

We received 44 responses to this question. Many respondents were supportive, some were unsupportive and a few provided no position.

Many of the respondents supported putting in place rules to facilitate change of ownership for biomethane plants to maximise the lifespan of assets, promote flexibility and continue generation of biomethane. Some thought it would also help to mitigate some of the investment risks.

Most respondents did not provide detail on the specifics of how such a mechanism could work. Some respondents stated that the GGSS and RHI should be aligned. Some suggested that a switch could be made from registering biomethane producers to accrediting individual installations. Respondents thought that it may be particularly beneficial if a company looking to sell their biomethane assets was in financial difficulties. Conversely, some respondents highlighted their preference that a legal entity owning a biomethane facility should be the accredited entity with the GGSS (as opposed to moving the registration to the plant). This would mitigate against owners selling assets to avoid settling third party liabilities within the supply chains which may have negative reputational impact on the industry and undermine investor confidence.

Other themes raised by respondents were around supporting cooperative ownership and some respondents requesting that the regulations clearly specify how registration transfers would interact with equipment relocation.

Government response

We will implement a mechanism to allow the transfer of registration of biomethane production between parties. This will enable the biogas production plants to be bought and sold with the ability to receive GGSS payments being transferred.

Similarly, to the ND RHI, we will look to ensure this mechanism can effectively support scenarios in which registration could be transferred. It is our intention that Ofgem will conduct the same checks on the new producer as on the existing producer, irrespective of the parties involved or whether this is in the context of internal reorganisation. We will require new producers to demonstrate their compliance with scheme eligibility, ongoing obligations, and sustainability requirements.

Interaction with the RHI

Q16: Do you agree with the proposal to not allow any interaction between the RHI and the GGSS?

Consultation proposal

The Non-Domestic RHI will close to new applications on 31 March 2021. The GGSS is a new, separate support scheme that will only support new applications. To ensure the GGSS remains distinct, it was proposed in the consultation to not allow any interaction between the RHI and the GGSS. Scheme interaction would also be administratively burdensome, so prohibiting interaction will ensure smoother scheme operation.

Summary of responses

We received 60 responses to the question. Many respondents were supportive of the proposal for no scheme interaction. The most common rationale was that interaction would be administratively difficult, as well as concerns around overcompensation and/or double subsidy. Some respondents thought interaction would be confusing or were concerned about a hiatus in market support. They were supportive of not allowing scheme interaction if this helps to avoid a prolonged break in subsidy.

Some respondents were unsupportive of the proposal and wanted to allow scheme interaction. Most frequently mentioned reasons included better value for money from expansion than building a new plant, improved flexibility, and lower risk of stranded assets. Some respondents advocated for other types of scheme interaction to be allowed, for example Combined Heat and Power (CHP) plant conversion to biomethane production.

Government response

The tariffs proposed for GGSS have been calculated to compensate new AD plants, and the associated equipment and infrastructure, that we expect to deploy as part of the new scheme and are based on best available evidence and the current market conditions.

Plants that have applied and are supported through the RHI by the time the new scheme opens are already constructed and have received support to cover their capital costs. This means that there is a risk of overcompensation if existing RHI plants were allowed to expand as part of the GGSS. To correctly evaluate that risk, the merits of individual applications under the terms of the GGSS would have to be assessed against the marginal cost of the expansion. Our understanding of these costs, however, is poor and has not been substantially aided by the consultation responses and stakeholder feedback received. Additionally, due to heterogeneity of the market, costs are likely to be highly plant specific. The financial situation and risks profile of a RHI plant may also be very different to a new project further complicating assessment of marginal cost of plant expansion.

As a result, the government will implement the consultation proposal to not allow scheme interaction. While we acknowledge that this could result in potential loss of further emission savings resulting from increased biomethane injection into the grid, we do not feel we can manage the overcompensation risk posed by allowing RHI plant expansion comfortably, in particular in the time provided and with our current state of knowledge. As the scheme is to be financed by gas suppliers, who we assume will pass their costs onto billpayers, it is critical that it offers good value for money. There is also uncertainty around the scale of potential benefits of this intervention, particularly in light of the consultation responses, and the extent to which these are dependent on wider scheme design (for example tariff rates).

Should our evidence base on expansion costs improve in the future, this decision can be re-visited during the lifetime of the scheme's application window.

Additionally, the government is aware of the likelihood of an overlap between the commissioning window for the third flexible allocation of Tariff Guarantees on the RHI and the launch of the GGSS. The government is keen to strike a balance between the need for accurate budget management on the RHI and GGSS and preventing situations where high value assets may become stranded if they are unable to meet the RHI commissioning deadline of 31st March 2022. As such, it is intended that where an RHI TG application has been withdrawn after the coming into force date of the GGSS regulations an application may not be submitted to the GGSS for the same production plant. This is intended to prevent a situation where RHI TG applicants could 'cherry-pick' between schemes. As there is a limited budget for TGs on the RHI such 'cherry-picking' risks applications crowding out RHI budget over other applicants where that RHI budget is not eventually spent as well as increasing uncertainty when collecting for the GGSS through the levy.

However, in order to prevent high-value stranded assets, where an RHI TG application has failed to meet the 31 March 2022 commissioning deadline they will be able to apply to the GGSS, so long as the anaerobic digester was not used to produce biogas prior to the coming into force date of the GGSS regulations.

Interaction with other government schemes

Q17: Do you agree with our proposal to allow biomethane producers to decide how much biomethane they wish to claim GGSS payments for within a given quarter?

Consultation proposal

In the consultation it was noted that dual participation in both the non-domestic RHI and Renewable Transport Fuel Obligation Scheme (RTFO) was permissible within the current regulatory framework. However, it also highlighted that the current RHI legislation requires that in order to claim both RHI and Renewable Transport Fuel Certificates (RTFCs), producers must claim entirely for either RHI or RTFCs in a given quarter. We had received industry insight which suggested that this significantly restricts the potential for producers to benefit from diversified revenue streams, and in some instances disincentivises production beyond the limit for Tier 1 payments, restricting the carbon savings offered by the RHI.

Therefore, in line with the “The Non-Domestic Renewable Heat Incentive – Ensuring a Sustainable Scheme” consultation, we proposed that the GGSS payment calculation formulae should allow for claiming across both schemes within a quarter for registered producers of biomethane. Producers would not be able to claim support under both schemes for the same consignment of gas however in order to avoid overcompensation. We asked for views from stakeholders on alternative ways biomethane producers could benefit from interaction between government schemes and how this might work in practice.

Summary of responses

We received 62 responses to this question. Of these responses, most respondents were supportive of the proposal to allow biomethane producers to decide how much biomethane they wish to claim GGSS payments for within a given quarter. A few respondents were unsupportive of the proposal and a few did not express a preference. The respondents in favour of the proposal gave a variety of reasons for this, most notably the flexibility this would offer producers to diversify their revenue streams and select the most financially appropriate scheme. There were many suggestions that this will help move towards biomethane being subsidy free in future. Other reasons for support included encouraging additional biomethane deployment as plants are encouraged to maximise their outputs, easier to manage plant finances, benefits to the gas vehicles industry, and flexibility in balancing summer/winter heat demand in the gas grid.

Although allowing the proposal was well supported, respondents also mentioned some administrative and other concerns, which they suggested would need to be worked through for the interaction to be effective. These included issues around fraud or double claiming risk and the need to audit the gas claims under each scheme, budget allocation, concerns about slower payments, and the desire for alignment across scheme in terms of waste definition and sustainability criteria.

Government response

As proposed in the consultation, the government will include a payment formula which allows biomethane producers to split payments between the GGSS and the Department for Transport’s (DfT’s) RTFO. This will enable different consignments of biomethane to receive payments from either the GGSS or the RTFO within the same quarter.

The government will make it a requirement that producers are not supported twice for the same biomethane consignment. RTFO legislation specifies the interaction with other Government subsidies and mandates DfT to prevent gas from being claimed under the RTFO where it has been claimed under another Government support schemes. To

support this protection against double claiming this will also be prevented in GGSS legislation.

We will work with Ofgem and DfT to ensure these regulations can be robustly applied to this pathway for GGSS claimants. Effective data sharing will be established to assure both administrators of the source and destination of biomethane. We will also ensure sufficient non-compliance powers are in place to take action where necessary. This will be sufficiently flexible to allow potential interaction with schemes that other departments may develop in the future.

At the launch of the GGSS, the government will allow producers to claim under both the GGSS and RTFO schemes. However, we acknowledge that interaction poses a risk to scheme budget management. We currently deem this risk to be low, but we will continue to monitor levels of interaction between the schemes to inform any future policy decisions.

Barriers to deployment

Q18: What are the main barriers to the deployment of biomethane AD plants and what potential solutions could help to overcome these?

Consultation proposal

To date, deployment of biomethane AD plants has been lower in some areas of Great Britain than in others. There are likely to be various reasons for this, including the high capital required for plants, access to gas injection points and feedstock availability. We are aware of some models being trialled to overcome these barriers, such as a number of smaller AD facilities in rural areas feeding their biomethane into a single injection point on the gas grid.

Whilst this section did not make any specific proposals, it did ask for views on the main barriers to deployment and possible solutions to them.

Summary of responses

There were 58 responses to this question. Many respondents said that the key barriers to deployment were financial barriers. Production of biomethane from AD is unusual compared to some other renewable technologies in that it requires not only upfront expenditure but also has significant ongoing costs. Respondents suggested that these costs are unlikely to reduce in the same way that they have for other renewable technologies, such as solar. A couple of respondents indicated that there were a few ways to reduce costs, but some potential ways could include increasing the tariff, removing the need for propanation prior to grid injection, and reducing the costs associated with gas grid connection. Some respondents also stated that the proposed tariffs for the scheme are not high enough to support deployment, others argued that depressions occurring without appropriate time to plan can deter investors as it makes the investment riskier. Tariffs are discussed in more detail in Question 4 and depressions in Question 6.

Another common theme among responses related to the capacity of, and access to the gas grid. Many respondents suggested local gas network capacity constraints are a significant barrier, particularly if plants are in rural or remote locations. Other capacity issues cited were that the seasonal nature of gas supply can often mean there is a lack of confidence in achieving grid connections that are operational year round; the networks providing more

transparency on where in the grid there is spare capacity and offering more flexible access to the grid that can mirror consumer demand.

Related to this, there were also responses around producers being able to access the grid. There were a number of responses around different networks having different processes and ownership models, and having more standard processes across networks would help the industry in accessing the grid. There were some respondents who indicated the networks are pursuing a program on how to respond to this issue. Similarly, costs for connections can be high and vary across networks.

Injection hubs were also raised by a few respondents, suggesting that current support on the RHI did not incentivise innovation in this area and consideration should be given to doing so on the scheme so that plants in rural areas could make use of 'virtual pipelines.'

Another commonly cited barrier to deployment was the availability of quality waste feedstocks to plants at an affordable gate fee. Some respondents suggested that some plants currently have to transport feedstock that is environmentally and financially costly. While this is perceived to be a significant barrier to AD biomethane deployment, respondents did not offer viable solutions to this barrier other than those already in train, i.e. Defra Waste Strategy, which will make more food waste available to biomethane plants from 2023. Related to this, there were a few suggestions that the lack of market for digestate was an issue and that building one would add an extra source of revenue for plants who could then improve deployment with the benefits.

There were also a few responses relating to propanation. Adherence to gas quality regulations and propanation requirements were mentioned in several responses as a barrier to AD biomethane deployment due to it having a 'substantial cost' to the biomethane sector. There were some suggestions that given propanation is an issue for other green gases such as hydrogen, the networks should work together to address the propanation issue across all green gases within the next few years.

Government response

The Government recognises the importance of providing the correct financial structure (tariffs, tariff length and tiering) to the biomethane industry to attract investment and encourage deployment, and also factors in the costs of propanation. The structure proposed in the consultation was a result of modelling that takes account of both the capital costs the industry needs but also the ongoing operational costs necessary to produce and inject biomethane. The structure is discussed in detail in questions 1 to 4 from page 10 and we feel confident that it will provide the necessary support to the industry to incentivise future deployment.

Many of the issues raised relating to grid access or capacity are wider issues than the scheme is set up to cater for, for example establishing ways to ensure capacity is available for plants to inject. Similarly, we recognise the potential for injection hubs in giving rural plants better access to the grid however, it appears to require longer term investigation with networks and further work would need to be done to be able to incorporate injection hubs in terms of administration, i.e. it is currently difficult for the administrator to track and attribute gas injection via an injection hub. We would also be concerned about inadvertently supporting a process that encourages use of transport on

roads. However, we recognise its potential in terms of potential cost savings for plants and are willing to consider it in future support mechanisms.

We recognise that waste feedstock availability remains an issue and this is discussed in more detail in question 9 in the GGSS section, including a commitment to review the waste feedstock threshold mid-scheme pending available evidence. We will continue to work with Defra on this issue on an ongoing basis to consider any new evidence that comes to light between the opening of the scheme and the mid-year review.

Further information

Q19: Do you have views on how the GGSS could be improved, beyond the ways described in this consultation?

Consultation proposal

We asked for further information and evidence around issues related to the support of biomethane AD plants under the GGSS.

Summary of responses

There was a wide range of issues addressed by the 67 responses to this question. Firstly, there were a number of suggestions on expanding the eligibility of the scheme to include other technologies historically supported by the RHI. Suggestions included continuing to support production from gasification and pyrolysis, as well as biogas produced and combusted for heat on-site, rather than injected into the gas grid. There were also a range of suggestions in supporting other green gasses such as hydrogen, bioLPG and bioSNG, citing that it would encourage innovation in these areas. Some also suggested that support should be expanded to other technologies so as to be technology neutral, including solar and heat pumps.

Some respondents questioned the intent and ‘ambition’ of the scheme, suggesting that targets should be increased or targets set to specific timelines. A few respondents suggested moving to a mechanism where support is given for overall carbon savings or measuring against fossil fuel equivalents as opposed to units of energy produced. They argued that doing so would capture the whole picture of carbon savings and encourage innovation across supply chains.

Some regulatory changes were suggested: one suggestion included allowing for more hydrogen blending ‘up to 20%’ and as well changes to billing methodologies. Another suggestion was around changing the classifications around waste and residues, with the intention of being able to include ‘liquid materials’ as residues.

There was also a range of changes in payments and financial support, including more being done to incentivise consumers to take up green gas by levying ‘brown’ gas use, different tariff rates at different times of the year to reflect demand or tariffs based on carbon savings and for use of waste diverted from landfill. Another suggested any electrical energy (kWh electrical energy) used in the upgrade process should be deducted from the amount (kWh) of biomethane produced and 50% of any heat (kWh thermal energy) be deducted from the biomethane produced. It was suggested this would level the playing field and enable the most energy efficient upgrading technologies to be the most successful.

Finally, there were a number of suggestions on longer term support. There were a few suggestions around extending the scheme beyond the stated time frame outlined in the

consultation and another suggested that there needs to be clarity on the long-term strategy for heat in buildings.

Government response

We recognise that a number of technologies and other green gases have potential to contribute to greening the gas grid, however many of them are yet to reach a commercially viable stage in the UK. For example, we recognise the potential benefits of gasification and there is some work in progress in the UK to develop this technology, however we believe it is not yet viable to consider it in this scheme with this type of support, but remain open to doing so in a future mechanism. We also recognise that on-site production is currently viable, however one of the scheme's aims is to green the gas grid and therefore on-site production falls out of scope.

We also recognise the need to set ambitious yet realistic targets for the scheme so that it can contribute to broader Government-wide Net Zero ambitions. We recognise that assessing the correct level of support, either through volume of production or wider carbon savings, is crucial but we consider the latter method currently very difficult to measure in an accurate way. We believe this scheme strikes that balance and will play a crucial role greening the grid and broader ambitions.

We recognise that there are regulatory challenges to green gas production but the scope of powers to make changes in some areas are limited and some, for example allowing a higher percentage of hydrogen blending is a wider issue than the scheme itself and would require more consultation and longer-term strategic work than this scheme allows for. Industrial trials are likely to indicate from 2023 whether hydrogen blends up to 20% are technically feasible for existing natural gas infrastructure. There is further work being explored in this area to consider options to ensure a commercially and regulatory viable market framework. Hence, hydrogen blending is being considered as part of a wider piece of work across the Department.

At the start of the scheme only biomethane injection including new AD plants will be eligible for the scheme. Expansions, and conversions from CHP will not be eligible at this time.

We believe we have the correct support structure that addresses one of the key aims of the scheme: to incentivise deployment over the lifetime of the scheme. This is discussed in more detail in questions 1 to 4 in the GGSS section. Finally, there were a few suggestions that the scheme should be longer to extend support for the industry, more detail on suggestions for the type of support that may be in place after the scheme are discussed in questions 21 and 22.

Green gas support in the longer term

Q20: 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?

Q21: Do you have any views on industry readiness for a market-based mechanism to support green gas in the longer term?

Consultation proposal

The consultation outlined that support for green gas under the GGSS will be limited to biomethane only and run from financial year 2021-22 to financial year 2025-26. For the longer-term, we expect to focus on market-based mechanisms, which leverage competitive forces to drive down costs and ensure cost-effectiveness, as the basis for any ongoing policy support for the range of green gas options that might be commercially available. We welcomed industry views on the most appropriate green gas support mechanism in the longer-term, referencing a form of supplier obligation and models similar to the Contracts for Difference (CfD) as possible options.

We also outlined how, in the longer-term, it may be appropriate to extend support to other sources of green gas such as hydrogen depending on the availability of cost-effective low carbon production and regulatory approvals. This may also include innovative green gas production technologies, such as advanced gasification, which can produce hydrogen or biomethane.

We stated that any decisions about green gas support in the longer term will be subject to further consultation.

Summary of responses (Q20)

The 72 responses we received to this consultation question covered a variety of potential mechanisms and technologies. Hydrogen was the other green gas technology that was referenced most often. Responses were evenly split on the merits of a supplier obligation and a CfD-type model for a market mechanism longer-term, with many highlighting the nuances and complexities of different markets, such as the difference between the hydrogen, biomethane and power sectors, meaning templates cannot be copied across wholesale, though lessons can be learned. Overall respondents were positive of a market mechanism being the future of support for green gas post the GGSS.

Respondents judged that a Supplier Obligation to provide a gradually increasing percentage of green gas would bring benefits both to green gas producers and to the taxpayer. Reasons they provided include: creating a market for green gas that could interact with existing certification schemes; it would be technology neutral; familiar to the industry; a step removed from government intervention which some respondents noted as being lower-risk and incentivise innovation for the lowest possible greenhouse gas emission green gases. Regarding a supplier obligation, respondents also suggested that a price floor for biomethane would be required to support investment and provide certainty for investors, and the costs of any obligation should be spread in an equitable way. The RTFO was cited as a possible template, specifically the option to 'buy-out' the obligation. There was also support for a Net Zero Heating Obligation requiring increasing deployment of low carbon heating over time, which could align with the new Future Homes Standards. Respondents suggested this could be technology-agnostic and support local variation in the best solution, allowing devolved powers to shape this.

Using a model similar to the CfD support mechanism in the longer-term was supported by many respondents. Reasons cited included that they work well for industries where up-front capital cost requires support and provide security of revenue once a CfD is awarded. The CfD has a good track record of helping to drive down costs of renewable electricity generation. Respondents noted the difference between the electricity and gas sectors, but suggested the CfD model could work well for biomethane and hydrogen industries. However, other respondents suggested that the CfD model would not work well for bespoke production like

biomethane, particularly if the allocation process is based on auctions, which can be a burdensome and complex process, but simplifying the process significantly could help.

Some respondents suggested that given there exists a hierarchy of GHG emissions reduction for the different technologies, future support should reflect this and the full lifecycle of a gas' production. This was both between technologies (e.g., hydrogen vs. biomethane) but also within a technology (e.g. different carbon intensities of biomethane production). These respondents also argued that support should be linked to tonnes of carbon saved rather than volume of biomethane injected, and tariff based on the price of a tonne of carbon rather than cost of gas.

The outcome of ongoing BEIS work on hydrogen business models and CCUS was highlighted as a key next step in the roadmap for hydrogen, and that any future support for hydrogen be linked to this work on hydrogen economy and business models. Some responses focused on the need for support for hydrogen in the longer-term in terms of developing business models, supporting production and stimulating demand. These responses highlighted the need to distinguish between 'blue' hydrogen and 'green' hydrogen in terms of both the benefits and support. Blue hydrogen was called out as having low carbon savings by comparison with other green gases, making it a less popular suggestion for support, whereas green hydrogen was suggested as having significant potential for delivering carbon savings and renewable heat.

BioSNG from gasification was highlighted for future support by a few respondents and that gasification has a mature investment community but requires greater certainty on government support, for trials to move to larger scale commercial plants. BioLPG was also supported by a few respondents as requiring and deserving of support in the long-term.

Summary of responses (Q21)

There were 49 responses to this question. Respondents provided further detail on the same themes as question 20 or attempted to answer both questions at once, meaning question 21 received less specific attention. The following summary covers new information beyond that summarised above. Most respondents were either unsure or doubtful that industry was ready for market-based mechanisms now, and cited reasons for this. A few respondents expressed their view that industry is ready now but included little supportive evidence. Green hydrogen trials were cited as evidence that it is ready for market-based support, to be used initially in transport until blending is allowed for heat through the grid.

However, most respondents suggested industry is not ready yet for market-based mechanisms to support green gas. Responses included suggestions for how to get industry to the point of readiness for a market-based mechanism, including support for supply chains, further hydrogen trials and clear signals for the hydrogen industry for when injection can be expected. Responses also highlighted the variability in readiness, with certain aspects of the industry described as ready, for example on-site AD for food waste, but many other aspects requiring greater support.

Government response

We are grateful for the responses about the longer-term future of green gas support. As stated previously in question 19, respondents have provided useful insight into the current state of green gas markets and will help inform future policy decisions including BEIS working separately with industry to complete industrial trials on the feasibility of hydrogen blending in the gas grid, as set out last year in the Prime Minister's Ten Point Plan for a Green Industrial Revolution.

While the GGSS will only be supporting biomethane produced via AD, there may be scope in the scheme's future to open it up to supporting other green gases, such as hydrogen, if the current barriers to deployment are overcome during the scheme's lifetime. Beyond the GGSS, we are continuing to engage with stakeholders on potential revenue mechanisms to support hydrogen and are aiming to consult on a 'preferred' hydrogen business model, or models, in 2021. Any future policy decision on longer-term future of green gas support will consider the outcome of this consultation, future consultations and of our wider strategic work on hydrogen.

Financial management of funding delivery

Budget control: GGSS

Q36: Do you agree with the proposed budgetary control mechanisms as a means of preventing scheme overspend?

Consultation proposal

In the consultation, we proposed utilising the following mechanisms to manage the budget and ensure value for money, while maintaining investor confidence to enable deployment:

- Tariff tiers to reflect the cost of producing biomethane at different scales, utilising economies of scale.
- A TG budget cap, which – if met – would temporarily halt new TG approvals until the scheme could be re-opened for new TGs once a new financial year begins, or some existing TGs withdraw.
- A degression mechanism to change tariffs to reflect the true cost in the industry. This would not affect plants with existing TGs under the scheme.
- An overall separate annual budget cap for biomethane against which we can monitor scheme expenditure. As on the RHI scheme, we will retain further control over expenditure through retaining the ability to close the scheme if this is considered necessary due to a forecast risk of overspend. To note, at the time of publication, this power has never had to be used on the RHI.

These mechanisms will build on those in place for the RHI, with decisions informed by scrutiny of data gathered by the administrator and by deployment forecasts based on market intelligence, ongoing stakeholder engagement, and evaluation evidence. We will continue to publish details of how the budget control mechanisms operate and regular updates on our latest expenditure forecasts to provide transparency and clarity for investors.

To ensure we are able to manage spend within the budget caps and accurately forecast going forwards, we proposed participants on the scheme should submit their output data and supporting evidence for each period within a specific time frame, and considered whether readings should be quarterly or more frequent.

Summary of responses

Many of the 44 respondents were supportive of the budget mechanisms proposed in the consultation and many of those who offered support did so without further comment. Some minor concerns remained around some of the proposed mechanisms that had precedent on

the RHI, for example the degression mechanism, and some respondents felt that this could negatively impact on the industry, possibly leading to hiatus' in deployment.

Some respondents identified a potential conflict between budget caps and emissions targets. In particular, two respondents suggested that meeting emissions reduction targets should be prioritised over budget management, though both appreciated the need to control spending.

There were a number of possible consequences of this prioritisation put forward: one suggestion was that the scheme's perceived lack of ambition could lead to a drain of knowledge and expertise from the industry, whilst another said that the proposed budget and budget controls would not be enough to incentivise investment to meet targets. Another stated approval for the scheme, but thought the budget cap should enable sufficient biomethane production to reach their own stated target of 20 TWh p/a by 2030.

The degression mechanism also attracted some concern from respondents, including those who were in support of the proposals overall. Some of the concerns were around whether or not it was necessary, given the other budgetary mechanisms on the scheme, and that it proved highly problematic for industry on the RHI, in one instance leading to a deployment hiatus, which had an impact upon investment. There were a number of respondents who implied that degenerations were manageable, but that there needed to be more transparency and notice if they occurred. One respondent said degenerations should be replaced by a tariff review and another said that the mechanism itself was flawed as it could not react quickly enough to mitigate overspend.

Government response

Given the support for the proposals, we intend to continue with all 4 mechanisms for the GGSS. Degressions and tariff tiering are discussed in detail in questions 6 and 1 respectively in the GGSS section and therefore not discussed here. In particular, and because, unlike the RHI, the scheme is only supporting one technology, we note the concerns around degenerations in further detail in Question 6 and discuss the amendments we will make to the mechanism to better reflect the needs of both the scheme's budget management and those of the industry.

We will continue with the proposed TG budget caps broadly as they work on the RHI, as they can provide an effective brake on applications that, left unchecked, would lead to overallocation of capacity and therefore overspend. These caps will be set to each financial year of the scheme and the 15 year tariff length and this will include a cap for the first 6 months at the start of the scheme to mitigate against the possibility of overallocation whilst tariffs are unable to degress (see Question 6). If the cap is reached in any financial year, all subsequent applications would be placed in a queue by Ofgem, until either the next financial year, when a further budget allocation is released and the application can be progressed, or until a TG application drops out, freeing up allocation for the current financial year.

As on the RHI, BEIS modelling will inform the yearly TG allocation based on the overall scheme budget, the modelling will also inform the Levy rate setting. Based on expected deployment profiling and expected biomethane injection, TG caps will be set to financial years until the end of the tariff payment window (i.e. up to 2040/41). Applicants will still be required to apply within the scheme timelines (autumn 2021-2025).

The aim of the annual budget cap is to control and monitor scheme spend, including assessing when to trigger a degeneration if necessary or to close the scheme. The annual

budget cap will be set according to market intelligence, forecasting based on expected deployment as well as taking into account expected scheme expenditure. The TG budget caps will be set as a proportion of the overall annual budget cap and allocated to each financial year the scheme is open. Since TGs will also be the only way to access the scheme, we expect this to be a benefit for forecasting and general budget management. Given this scheme only covers one technology, we will monitor both caps as the scheme progresses and retain the option to discontinue one of the budget cap mechanisms (TG or annual) if either is deemed surplus to requirements.

The cap will be periodically reviewed, which can then feed into the publication of levy rates along with the annual tariff review. This is particularly important because of the levy element on the GGSS, as it will help mitigate against overspend. As on the RHI, we will continue to publish regular data so industry can see the available capacity on the scheme. The forecasting mentioned above will be based on commercial intelligence gathered from the industry, network agreements submitted as part of the application process and expected availability of food waste, as well as detailed analysis and scenario testing. This would inform the maximum collection amount from the levy, which would also include adjustment for factors such as administration fees, and headroom.

There are no budget caps stated in the current RHI regulations, instead there are provisions to periodically review and publish budget allocations for each financial year. We intend to transfer this way of working into the new scheme, as it allows for the flexibility to respond to improvements in the market and new policy changes, for example the introduction of separate food waste collections that increases the scope for its use in AD or the industry displays more capacity earlier in the scheme than expected.

As suggested in the consultation, we intend to continue with quarterly submission of data as on the RHI. This will ensure the forecasting uses the most up to date information from the market and maintains a reflection of the projected market trends that is reasonable and based on sound evidence collected from the industry. The forecasting will work as described above. Monthly data will be released, as on the RHI, to allow potential applicants to make an assessment of how likely the cap is to be triggered and the scheme closed, providing transparency to aid financial decision making.

Finally, it is important for producers to note that Ofgem will 'backdate' eligible payments for any biomethane injected by registered biomethane participants from the launch of the GGSS in 2021 until Q1 2022/23, with the first payments to biomethane participants being made by the end of Q1 financial year 2022/23. This is due to the first levy collection happening in Q1 2022/23, in order to provide sufficient notice period to suppliers ahead of levy collection after the first levy rates are set. More information can be found in question 15 of the Green Gas Levy section of this document.

Technologies and uses not supported through this policy

Biogas combustion

Q39: Do you agree with not supporting biogas combustion under the new policies?

Consultation proposal

Whilst support for biogas combustion has been provided through the Non-Domestic RHI, our primary objective for this policy is to green the gas grid through biomethane injection. As such, we proposed not to support biogas combustion on the scheme.

Recent deployment under the RHI has also remained low, with only 16 applications for accreditation to the non-domestic scheme in 2020 with an average capacity of 550kW¹⁰, suggesting a limited decarbonisation opportunity.¹¹

Biogas combustion installations supported through the RHI have typically provided heat to a combination of on-site process, space and water heating uses. We are aware that some biogas installations have historically provided heat to processes such as drying, which are no longer eligible for support under the RHI. As set out in the section on process heating, we do not intend to provide support to process heat uses through these policies.

We do recognise that there are certain rural areas further from potential biomethane injection points to the gas grid, where on-site use of biogas may provide a beneficial use of waste feedstocks. However, we presently have insufficient evidence regarding the scale or detail of these opportunities. Therefore, we asked for evidence of any substantial decarbonisation opportunities that could form part of a wider strategic case to support biogas combustion.

Summary of responses

Many of the 86 respondents who answered this question were in favour of not supporting biogas combustion in the GGSS. Around half of respondents who were supportive gave no further comment. The key reason for supporting our proposals was the lack of clarity on the strategic position of biogas combustion on a scheme that has a key aim of greening the gas grid. Some also suggested that biogas combustion should have its own support mechanism or incentivised where connection to the gas grid is not an option.

The key reason given by those disagreeing with the proposal centred around supporting renewable heat in rural areas away from the gas grid, and for SMEs, particularly in the food and drink sector where it can help decarbonise production.

Similarly, a few respondents said farms and rural communities may stand to benefit from biogas combustion as most farms are off-grid and could benefit from on-site AD plants with close proximity to feedstocks. Conversely, and related to the strategic issue above, a few respondents stated that more research into rural heat to provide data and further insight into the opportunities for off-grid biogas would be helpful.

There were also a few short responses that suggested the low uptake on the RHI was down to its late inclusion but also lack of development and innovation in this area and that not including it on the scheme will exacerbate this. There were also a few that suggested expanding support to all technologies, including biogas combustion, this issue is discussed in more detail in Question 19 of the GGSS section.

Government response

¹⁰ BEIS (2021) Renewable Heat Incentive Deployment Statistics December 2020, table M1.2 and M1.3, <https://www.gov.uk/government/statistics/rhi-monthly-deployment-data-december-2020-annual-edition>

We recognise that there are reasons to offer support for biogas combustion or similar off-grid solutions, particularly in rural areas where off-grid homes can use such technologies and further encourage renewable heat and accompany supply chains in rural areas and the food and drink sector.

However, there are a number of strategic issues that make inclusion of biogas combustion on the scheme unclear. Firstly, one of the key aims of the scheme is to increase the proportion of green gas in the grid and it is highly unlikely biogas combustion can support that aim. Secondly, given this key aim, it is unclear whether support from a levy-funded scheme could be justified if used to support individual on-site solutions. Thirdly, we agree with respondents who stated that the overall strategic position for biogas combustion is unclear and finally, uptake of support for biogas combustion on the RHI has been low. Therefore, we will continue not to support it on this scheme.

Compliance

Participant compliance: GGSS

Q42: What improvements could be made to the proposed approach for tackling non-compliance for participants under the GGSS?

Consultation proposal

An intention was outlined in the consultation for the compliance and auditing process for biomethane plants in the GGSS to be based closely on the existing processes for the RHI. For on-going compliance and eligibility requirements, Ofgem may choose, for example, to use reviews, on-site audits and inspections as appropriate. It is our intention that the scheme administrator will have the discretion to carry out a suitable programme of audits to monitor compliance.

It was also proposed to base the compliance powers for the GGSS on Ofgem's existing powers for the RHI where appropriate. These would include, but not be limited to the power to: request information from participants, conduct on-site audits; recoup support issued through tariffs; withholding, suspending, or reducing tariff payments where Ofgem considers that there has been a material or repeated instances of non-compliance; and/or excluding a participant from the scheme.

Summary of responses

There was lower engagement with this question than others in the consultation. We received 27 responses, some of them only relevant to the Clean Heat Grant. The most frequent responses relevant to the GGSS were either that no additional powers are needed, stating that the RHI regime is sufficient or calling for alignment with the RHI.

There were individual suggestions for improvements, but no themes emerge and there was frequently little detail. Examples include suggesting closer working with the Environmental Agency on waste returns, provision of better information and/or training for participants to prevent non-compliance and shifting compliance oversight from the administrator to Local Authorities.

Government response

As proposed the government will base the compliance and auditing processes for the GGSS on the existing one for the RHI where appropriate. We are committed to ensuring that the administrator has all relevant powers to ensure an effective compliance regime. However, there are some areas of compliance that have been updated to reflect improvements in environmental requirements or to strengthen the regulations. For example, as discussed in questions 9 to 12, most environmental sustainability obligations on the RHI remain, with the addition of new digestate requirements outlined in Question 13 and provisions for fossil fuel contamination outlined in question 10. Also, given the scheme is technology specific, we will update definition of commission so it is better suited to biomethane production and injection. This is discussed further in question 8. Such changes will be reflected in the scheme's regulations.

We are committed to ensuring that the administrator has all the relevant powers to ensure an effective compliance regime.

A Green Gas Levy

The GGL is expected to launch alongside the GGSS in autumn 2021, with the first levy payment from gas suppliers being collected in April 2022. Levy payments will be collected for the duration of the GGSS tariff payments.

As the intended administrator of the GGL and GGSS, Ofgem's responsibilities will include managing the collection of the GGL from gas suppliers along with the distribution of payments to biomethane producers. They will also work to reduce the likelihood of biomethane producer and gas supplier non-compliance.

The 'Consultation on a Green Gas Levy',¹² sought views on a number of proposals on the levy including:

- Applying the levy on all licensed gas suppliers in GB, excluding those that supply green gas exclusively.
- The design and requirements of the GGL.
- Budget control and financial management of the levy.
- The intended supplier compliance and enforcement powers.
- A future transition to a volumetric levy.

Having reviewed the consultation responses and evidence, the government response is set out below.

Scope of the levy

Q1: Do you agree with our rationale for applying the levy to all suppliers of gas into the grid (apart from those that supply green gas exclusively)?

Consultation proposal

The consultation proposed placing a levy on all licensed fossil fuel gas suppliers, without exemption. The consultation specifically referred to the fact that there would be no exemptions for carbon offsetting or for small suppliers. It was also proposed that gas suppliers will be subject to full levy costs if any proportion of their gas falls within the definition of fossil fuel under section 100 of the Energy Act 2008 (and accordingly within the definition of "natural gas" in the Energy Act 1976). It was stated that this means that suppliers who also supply a proportion of green gas will still be subject to the levy.

Summary of responses

Of the 46 responses to this question, many agreed with the proposal to apply the levy to all suppliers of gas into the grid. The main reason these respondents gave is that customers on the gas grid should help fund the decarbonisation of the gas grid, given they will benefit from the wider benefits from reducing carbon emissions.

¹² BEIS (2020) [Consultation on a Green Gas Levy](#)

Of the respondents who did not support applying a levy on all gas suppliers (with an exclusion for 100% green gas suppliers), the main reason raised by some of these respondents was that it does not incentivise gas suppliers to supply more green gas. A couple of these respondents also raised concerns that it would likely mean gas consumers that may pay extra for green gas would likely also pay for the levy. Similar concerns were raised amongst some respondents supporting the proposal. Some respondents suggested gas suppliers that provide a proportion of green gas should see the percentage of green gas they supply excluded from their levy payments.

A further reason for opposing the proposal was that some of the unsupportive respondents stated that the levy on all gas suppliers would be administratively costly and therefore burdensome for them, especially with the impact on suppliers from COVID-19.

Government response

The government believes that licenced fossil fuel gas suppliers have a role to play in paying for the costs of decarbonising the grid. This view was supported by many of the respondents to the consultation.

The GGL will apply to “designated fossil fuel suppliers” of gas, as defined under section 100 of the Energy Act 2008. Gas suppliers who can evidence that they have serviced 95% to 100% of their gas portfolio with green gas for the entirety of a levy scheme year (i.e. 1 April to 31 March) will be excluded from paying the levy for that year. The government has taken the view that a “de minimis” threshold of 95% rather than 100% provides a buffer that is necessary to mitigate the risk of 100% green gas suppliers being inadvertently charged. This threshold also reduces the administrative and financial burdens on both suppliers and the administrator associated with charging backdated levy payments where a green gas supplier drops slightly below 100% green gas supplied.

Gas suppliers that fall into the 95-100% green gas supplier category will be required to provide an assessment of the likelihood that they will supply 95-100% green gas for the following scheme year in advance of the levy rate being set each year, which will inform a determination on whether that supplier should be provisionally exempted for that scheme year. Guidance will be provided in due course outlining the assessment and determination process.

Green gas suppliers in this category will also be required to provide retrospective evidence of green gas supply in the form of retired green gas certificates by a specified date, after each scheme year ends.¹³ Where such evidence establishes that a supplier should have been charged the levy (e.g. because they were excluded but are unable to evidence that at least 95% of their gas was green), that supplier will be required to make a backdated payment for the relevant scheme year, which may include added interest. The government intends to treat such backdated payments as surplus funding, which will be netted off the next year’s levy, resulting in a reduced levy rate for all suppliers. Where Ofgem have reason to believe fraud or manipulation of green gas supply evidence has occurred, enforcement action may be considered. Any supplier that was not provisionally exempted for the relevant scheme year, but that can provide evidence by the specified date after that year that they have supplied 95-100% green gas, may reclaim the levy contributions that they made in that year, which may include added interest.

¹³ Certificates will only be used as evidence for the GGL and will not be required for the GGSS. This is outlined in Q10 of the GGSS section of this response.

While the government acknowledges the views of some respondents to the consultation that proportional exemptions for any green gas supply should be considered, the government is clear that suppliers will not be exempt from the levy on proportions of their gas portfolios that include green gas. Where the percentage of green gas supplied falls below 95% of all gas supplied over a scheme year, a supplier will be subject to the levy.

Design of the Green Gas Levy

Rationale for a per meter point approach

Q2: Do you agree with our rationale for proposing that the GGL be charged on a per meter per day basis, according to gas supplier meter points served?

Consultation proposal

The consultation proposed launching the GGL with a per meter point levy design. This would see levy costs distributed amongst gas suppliers according to the number of gas meters that they supply. It was set out that this would provide gas suppliers and consumers with high certainty of costs and is less complex to implement.

The consultation also set out the key challenges in implementing a volumetric (per unit) approach for the launch of the GGSS in autumn 2021. It acknowledged the benefits of aligning levy costs more closely with gas consumption and made clear it is the government's intention to transition to a volumetric levy design in 2024/5 or as soon as possible thereafter.

Summary of responses

There were 47 responses to this question. Respondents were quite clearly split, with some respondents supporting the proposal to charge the GGL on a per meter per day basis at launch, while some were unsupportive. Only one respondent gave no position. For those respondents that were supportive, several reasons were given including the simplicity of design, reduced administration burden, and the stable meter point base that would ensure consistent calculation of the levy and provide certainty of costs for suppliers. Those respondents that were unsupportive of the proposal were primarily concerned that the per meter per day approach was regressive and unfair for vulnerable and lower usage gas consumers, instead preferring launching the scheme with a volumetric design.

Government response

It is important that the GGL is delivered by autumn 2021 to launch the GGSS and to minimise the hiatus in support for biomethane production, thereby reducing carbon emissions and supporting high quality jobs in the biomethane industry at a time when economic recovery is so important. Having considered the responses to this question, the government intends to launch the levy with a per meter point design that would see levy costs distributed amongst gas suppliers according to the number of gas meters that they supply. The government intends to transition to a volumetric levy design as soon as possible, subject to feasibility issues being overcome.

The government recognises the preference of some respondents for launching with a volumetric levy design, especially with regards to the benefits that a levy more closely aligned to gas consumption can have in relation to more vulnerable and low usage gas consumers. There are a number of feasibility challenges, including settlement timings, the impact on energy intensive industries (EIIs), and seasonal variations in gas consumption and consumption proxies that will need to be overcome before adopting a volumetric levy. We are actively considering how to address these to ensure that this transition can happen as soon as possible. These challenges are considered further in the government's response to questions 24 to 27. In this response, we set out the decision to launch with a per meter point design, which is less complex than a volumetric levy and provides greater certainty to suppliers and consumers on costs.

The impacts of the levy on billpayers, both with the initial per meter point approach and transition to volumetric, are expected to be minimal in relation to other policy costs. For domestic consumers, bill impacts are expected to peak at around £4.70 by 2028, assuming a transition to volumetric levy. A full assessment of impacts on consumers will be included in the Final Impact Assessment, which will be published following the publication of the government response. There are also a number of government policies that aim to offset the impacts of policy costs on vulnerable and low-income customers. Energy efficiency schemes, such as the Energy Company Obligation (ECO), which will run from 2022 to 2026, with an increase in value from £640 million to £1 billion per year,¹⁴ will become especially important once the levy transitions from a flat rate to a volumetric design, as a better insulated house will mean less gas is needed to heat the home, likely resulting in lower policy costs for the consumer.

Announcement of the first levy rates and notice period for suppliers

Q3: Do you agree that the steps outlined in the consultation provide notice to suppliers ahead of the first levy collection, and the notice period for subsequent years, are sufficient?

Consultation proposal

The consultation set out our intention to provide gas suppliers with a sufficient notice period of the levy rate ahead of the first levy collection. This is to ensure that gas suppliers can collect funds from their customers and make any changes to their systems before the first levy collection, which is intended to be in Quarter 1 of FY 2022/3. We set out our intention to formally announce the first two levy rates approximately six months before the first levy collection, following regulations coming into force.

Summary of responses

Of the 34 responses to this question, most respondents supported the proposals for the notice period for gas suppliers ahead of levy collections. Many respondents agreed that the notice period would give gas suppliers sufficient time to calculate and pass the costs of the levy on to their customers. Some respondents did caveat that despite supporting the proposed three-month notice period for the levy rate for subsequent years after the first levy collection, they would welcome as much notice as possible. One reason given by respondents for requesting additional notice, was that they have fixed annual contracts with their non-domestic customers. Respondents also highlighted that suppliers would need time to recover from the financial

¹⁴ BEIS (2019) [Sustainable Warmth: Protecting vulnerable households in England](#)

impacts of COVID-19. They stated that having additional notice would aid with price calculations and reduce the risk of shortfall. A few respondents suggested something similar to the network transportation charges to provide suppliers with indicative prices for their forecasting.

For the eight respondents that were unsupportive of the proposals, the main reason given was that the notice period was too short and would not allow suppliers time to assess their prices and notify customers.

Government response

The government believes the notice period of approximately six-months ahead of the first levy collection is appropriate to allow gas suppliers to include these costs in their forecasts and ensure they can collect funds from their customers. The government recognises the concerns raised by some respondents about the length of the notice period. The timings were set at a level that would minimise the hiatus in support for biomethane production.

The government will therefore formally announce the first two levy rates approximately six months before the first levy collection. One levy rate will apply from the launch of the GGSS in autumn 2021 until March 2022, and the second levy rate will be announced at the same time to cover the period between April 2022 and March 2023.

In the future Ofgem may wish to consider the impact of the GGL on the default tariff cap. To enable Ofgem to do so, in future scheme years, we will announce the levy rates in early January, three months ahead of the first quarter of the scheme year. Ofgem can then take these costs into consideration for default tariff cap announcements (in February and August) if relevant.

Calculating the levy rate

Q4: Do you agree with our proposed methodology for calculating the pence per meter per day levy rate?

Consultation proposal

The consultation set out that a “pence per meter per day” levy rate would be set approximately three months in advance of each scheme year, with the exception of the initial two levy rates, which would be set six months in advance of the first collection in April 2022.

A proposed methodology for calculating the levy rate was outlined, noting that the maximum projected GGSS spend for the upcoming year would be divided by the projected total number of meter points in the market for that year (multiplied by 365).

It was also proposed that the levy rate calculation would also include a small amount of headroom.

Summary of responses

There were 36 responses to this question. Many of the respondents were supportive of the proposed methodology for calculating the levy rate, while some respondents were unsupportive. Those that supported the proposals agreed that the proposed methodology was

straightforward and would enable the levy to be set at the right level to ensure that sufficient funds are collected for the GGSS each year. Of the six respondents that specifically mentioned the collection of headroom, all of these agreed with its inclusion in the levy rate to minimise the impact of under collection.

As above, the main concern for those respondents that were unsupportive of the proposal was due to their preference for the scheme to launch with a volumetric levy design to ensure that the costs of decarbonising the gas grid are borne by those consuming the most gas. A few respondents preferred a tiered approach to calculating the levy rate, with different charging levels being set for different tiers of meter point, as it was felt that this would more fairly balance costs between gas users.

Government response

The government intends to set out a methodology in regulations for calculating a yearly levy rate on a pence per meter per day basis, which will be announced approximately three months in advance of the first day of each scheme year (i.e. 1 April), except for the levy rates for 2021/22 and 2022/23 which will be announced approximately six months ahead of the first levy collection in April 2022 (see the response to Question 3 for more detail).

The levy rate (which will be set on a pence per meter point per day basis) will be calculated by dividing the GGSS budget cap for the upcoming year – plus headroom and the associated administration costs for both the GGSS and GGL, with underspend from the previous year(s) subtracted – by the projected total number of meter points in the market for the upcoming financial year (multiplied by 365, or 366 in a leap year). In the unlikely event that there has been a funding deficit in one year, this would be addressed through Exchequer funding. The funding deficit would be recouped in the following year plus one, and this would be included as part of the levy calculation for that year.

Each year, alongside the announcement of the following year's levy rate, the government will publish a document setting out the amounts for each of the variables that informed the levy rate calculation.

The government will proceed with the proposal to collect a small amount of headroom through the levy. It is expected that headroom will be required to account for events that might cause a delay or deficit in GGSS payments and to avoid triggering the mutualisation process when there is a small shortfall in levy collection. Such events may include unanticipated transitions of suppliers to supply exclusively (95% to 100%) green gas, reductions in meter point totals compared to forecasts, or errors in underspend forecasts when setting the yearly levy rate. This is not expected to substantially increase costs and the level of required headroom will be reviewed regularly and published ahead of each scheme year.

Further detail on the government's approach to managing underspend as part of the yearly levy calculation is set out in response to Question 5.

The government's view on a tiered approach to charging the levy is set out in response to Question 12.

The government understands the strong views of some stakeholders on the need to move quickly to a volumetric levy design and is actively considering how to address the current feasibility challenges to ensure that this transition can happen as soon as

possible. The government's position on this is set out further in the response to Questions 24-27.

Q5: What are your views on how underspend should be managed?

Consultation proposal

In the consultation, it was stated that the government was considering how to appropriately manage any yearly scheme underspend in a way that means suppliers can opt to reflect these savings in their customers' bills.

Two possible approaches were set out – either to factor underspend into levy rate calculations for the following year or to return money directly to suppliers on a yearly basis – and respondents were asked for their views on these.

Summary of responses

Of the 38 responses received, some respondents supported rolling over underspend and reducing the next year's levy rate accordingly, primarily due to concerns that gas customers might not see these costs returned to them if money were returned directly to suppliers, as well as the administrative burden for suppliers if they did choose to refund their customers.

Some respondents preferred returning money to suppliers, with a few suggesting that it should be a legal requirement for suppliers to return that money to their customers.

Some respondents did not support either option, and instead suggested alternative approaches, including using surplus funds to increase GGSS budgets or diverting underspend to support other energy-related schemes.

One respondent expressed no preference between the two options, noting that the relatively small impact of the levy will likely go unnoticed by most gas customers anyway.

Government response

The government intends to manage a scheme surplus arising in any given year by rolling this over to the following year and subtracting it from that year's levy as part of the annual levy rate calculation. This will ensure that the money collected from gas suppliers is reinvested into the GGSS. It is the government's view that reducing the following year's levy rate provides a greater level of certainty that gas consumers will see the benefits reflected in their bills, compared to refunding underspend to gas suppliers.

The yearly levy rate will be announced approximately three months ahead of it coming into effect on 1 April each year and underspend totals for the year will only be known after the final GGSS payments have been made following any mutualisation process if it has occurred for that scheme year (i.e. in Quarter 1 of the following scheme year). To address this, the government intends to use a forecast of GGSS expenditure for the final quarter of each scheme year (i.e. 1 January – 31 March) to determine the amount of underspend expected at the end of the scheme year to inform the levy calculation. Any discrepancy between the forecast underspend and actual underspend, once determined, will be addressed as part of the following year's levy setting process (i.e. with a one-year lag).

While the government acknowledges the suggestions from respondents that underspend could be refunded to suppliers with a legal requirement to return that money to their

customers, it is important to be clear that the powers in section 100 of the Energy Act 2008 which will underpin the GGL regulations do not allow the government to set conditions or otherwise require suppliers to pass any returned funds back to their customers. Furthermore, the government can only legally spend money raised through the GGL on a scheme to facilitate and encourage the renewable generation of heat, in this case the GGSS, which precludes any option of diverting surplus funds to other schemes.

Timings of payments

Q6: Do you agree with our rationale for proposing that levy payments should be made quarterly?

Consultation proposal

The consultation outlined the benefits of having more frequent levy collections and proposed that the GGL should be collected from gas suppliers on a quarterly basis (aligning with the financial year).

It was set out that a supplier's quarterly levy payment would be determined by multiplying their "meter point day" figure (the sum total of meter points served by that supplier for every day in the previous quarter) by that scheme year's pence per meter per day levy rate.

It was noted that the proposed approach had the benefits of ensuring that suppliers are charged according to accurate meter point data rather than forecasts. It would also eliminate the need for reconciliations and avoid the increased costs and complexity that this would likely involve.

Summary of responses

Of the 35 responses received, most respondents were supportive of the proposal that levy payments should be made quarterly. The main reason for agreement was that it reduces the administrative burden on suppliers. Many supportive respondents agreed that a quarterly payment system incentivises suppliers to ensure consistent and sufficient provision of necessary funds to meet their levy obligations. Some respondents noted that a quarterly payment cycle will help to prevent the build-up of outstanding payments amongst suppliers and argued it would also help to mitigate the risk of a large number of outstanding payments being mutualised across the supplier industry.

A few respondents were unsupportive of a quarterly levy payment proposal. These respondents proposed either a monthly collection, as it lowered the risk of non-payment, or annual levy collection, to reduce administrative burden on suppliers.

Government response

The government will proceed with the proposed consultation approach to collect GGL payments from gas suppliers on a quarterly basis. Considering the responses to the consultation, the quarterly levy payment cycle will minimise the administrative burden on suppliers and reduce the risk of default. Similarly, a pence per meter per day levy rate that is charged retrospectively, based on suppliers' meter points for the previous quarter, will eliminate the need for reconciliation, which is likely to be administratively burdensome. Any interest accrued on the quarterly levy payments while in Government Banking Service accounts will be treated as underspend and netted off the following year's levy.

Q7: Do you agree with our proposal that gas suppliers should provide quarterly meter point data to Ofgem to inform quarterly levy payment calculations?

Consultation proposal

As part of the quarterly levy collection proposals, the consultation set out that gas suppliers should be responsible for providing accurate daily meter point data for the previous quarter to facilitate the calculation of their quarterly payment.

Summary of responses

Of the 35 responses received, responses were evenly split on the proposal that gas suppliers provide Ofgem with quarterly meter point data, with some respondents supporting the proposal and some opposing it. One respondent gave no clear position. For the respondents that supported the proposal that gas suppliers should provide quarterly meter point data to Ofgem, many did not give a reason for supporting the proposal. Of the seven who did, most commented that suppliers should have this information readily and easily available.

The respondents who were unsupportive of the proposal highlighted that it would add additional administrative burden to suppliers, and potentially increase the risk of data errors. Instead, many of those respondents proposed that Xoserve data is used to collect meter point data, as Xoserve has a complete record and centralised system of supplier meter points.

Government response

Having considered these responses, the government is aware that there is no clear consensus as to whether quarterly meter point data should be provided by gas suppliers directly. We acknowledge the feedback that the quarterly data requests might place additional administrative burdens on gas suppliers and note that several respondents felt that this data would be better sourced from Xoserve systems each quarter.

Gas suppliers will be ultimately responsible for providing this information but the specific processes for the collection and confirmation of meter point data will be developed within the scheme administration.

Q8: Do you agree with the assumptions made and the costs set out for suppliers of familiarisation with the regulations and administration in the accompanying Impact Assessment?

Consultation proposal

The consultation stage Impact Assessment set out assumptions for the administrative costs expected to be experienced by suppliers under the proposed options. These costs were for familiarisation, updating systems and engagements with customers to notify them of the levy. This included costs both during the set-up stage of the levy, and ongoing costs of administration.

Summary of responses

Of the 25 responses received, many respondents agreed with the assumptions set out, some disagreed and some partially agreed or gave no position. The main points raised within the responses were ensuring the assumptions covered the range of administrative activities suppliers would be required to undertake. For example, engagement with customers and Ofgem; that administration of a volumetric levy would be more time consuming and expensive for suppliers than a per meter point levy; and that administrative costs associated with the transition needed to be set out.

Government response

The government takes on board the feedback regarding the assumptions. Details of administrative costs associated with the transition to a volumetric levy, and greater detail of administrative costs considered including under a volumetric levy, will be set out in the Final Impact Assessment, which will be published following the publication of the government response.

Levy payments and credit cover

Q9: Do you agree with the proposal to require all gas suppliers to secure credit cover?

Consultation proposal

The consultation proposed that as part of a gas supplier's requirement to pay the levy, they will be required to lodge credit cover with Ofgem, which would be at least 100% of their upcoming quarter's levy payment. The consultation also proposed that we intended credit cover to be drawn down at Ofgem's discretion.

Summary of responses

Of the 34 responses received to this question, many respondents were supportive of the proposal, some were unsupportive, and only one gave no position. The main reasons respondents were supportive of the proposals included the increased likelihood of biomethane producers being paid on time and mitigating risks and costs, such as the costs associated with mutualisation being triggered. Some respondents noted that credit cover should be lodged early, and the minimum credit cover requirement should be set out in the regulations. A few respondents in support noted the need to protect against supplier insolvency.

The six respondents that were unsupportive of the credit cover proposal mentioned the burden and costs on suppliers in having to lodge credit cover.

Government response

The government is mindful of the costs (particularly administrative costs) of credit cover to gas suppliers. However, the government is also clear on the importance of robust arrangements to ensure the required funds are collected from the GGL. Lodging sufficient credit cover as part of the levy payments will help to limit the likelihood and impact of possible mutualisation events, given the burden and cost this can place on non-defaulting suppliers. The government has therefore decided that credit cover will need to be lodged by gas suppliers, which can be drawn down by Ofgem in instances where a gas supplier does not make a levy or mutualisation payment by the corresponding due date.

Ofgem will notify a gas supplier to lodge their credit cover, based on a forecast, and ensure it covers 115% of their next quarterly levy charge. A gas supplier must keep their individual credit cover requirement at the required level or higher¹⁵, the formula for which will be set out in the regulations and will be calculated by Ofgem for each supplier. The formula will be based on an estimated number of meter points that a gas supplier will serve for the quarter ahead, multiplied by the relevant levy rate and an uplift factor (15%). A small additional amount of credit cover lodged through the uplift will account for the possible increased market share since a supplier's latest actual meter point data. Quarter on quarter numbers of gas meter points that a supplier can serve can vary and if a gas supplier's market share grows, and they take on additional meter points, their levy contribution could be greater than the latest available data on their actual meter points served (to which the calculation refers).

Following the levy payment deadline (and any applicable 'cure period'¹⁶) and mutualisation payment deadline where there is insufficient payment of either levy or mutualisation payments, credit cover will be drawn down automatically, rather than at Ofgem's discretion. Ofgem will notify the supplier(s) that their credit cover has been drawn down. The regulations will set out as far as reasonably practicable the circumstances under which gas suppliers' credit cover will be draw down. This is to provide clarity, as well as to avoid unnecessary administrative burden.

The details of the process where a gas supplier requests their excess cover repayment are returned, for example where a gas supplier has lodged excess credit cover above the required level, will be published (e.g. in guidance) in due course.

¹⁵ Including where credit cover has been drawn down or where they have taken on additional meter points.

¹⁶ A cure period is for those suppliers who are not considered at risk of defaulting by Ofgem, to rectify their position by lodging their credit cover. Where Ofgem determines it unlikely that a supplier will lodge their cover, Ofgem may waive the cure period.

Q10: Do you agree with the forms of credit cover that we are proposing could be provided by suppliers?

Consultation proposal

In the consultation we proposed that credit cover is either lodged as a standby letter of credit with a bank with a required credit rating or as a cash payment, as these are forms that can be drawn upon quickly should payments remain outstanding after the levy payment due date.

Summary of responses

There were 31 responses to this question. Many respondents supported the proposed forms of credit cover being either cash payments or letters of credit, some were unsupportive, and a few gave no position.

Some respondents suggested alternatives in addition to the two forms of credit cover proposed. For those respondents proposing an alternative, most suggested 'Parent Company Guarantees' (PCGs), favoured because of their lower costs. Other forms that were suggested were: insurance; independent credit assessments; third-party guarantees; or 'suitably robust escrow arrangements.'

A few respondents noted that small suppliers have a different cash flow profile to larger suppliers and may find it difficult to lodge a letter of credit and provided an alternative proposal that the credit cover requirement should reflect a supplier's payment history. They also noted that a letter of credit is likely to disproportionately affect small suppliers who may find it harder to obtain as opposed to the cash credit cover route.

Government response

In line with the proposals in the consultation, gas suppliers will be able to lodge cash and/or letters of credit as the two forms of accepted credit cover in order to cover their requirement to lodge sufficient cover in advance of a quarter. The government considers it important that credit cover can be drawn down within days of a supplier defaulting on their levy payment to prevent delays in accessing the funds needed for GGSS payments. Cash credit cover and letters of credit provide this required level of liquidity. Any interest on cash credit cover lodged by a gas supplier will be returned each year by Ofgem.

The government is aware from stakeholder feedback that different forms of credit cover suit different types of supplier and the option of either cash or letters of credit should help with this.

We have carefully considered requests from respondents to include PCGs as an acceptable form of credit cover. As PCGs can take longer to access than cash or letters of credit, this may increase the likelihood of mutualisation occurring across all non-defaulting suppliers. In addition, due to the difficulty in the monitoring of the consistency in minimum credit ratings for PCGs, they will not be included in the GGL as an approved form of credit cover.

Where a supplier has lodged a letter of credit, it is important to note that the credit cover lender is required to have one of the minimum required credit ratings, described in the consultation, which will be set out in the regulations. Suppliers must have confidence in the credit rating of the lender. Suppliers will be responsible for ensuring that they have a

valid letter of credit from a lender with the required credit rating and the letter must be in the correct format which will be set out in future guidance. Suppliers must monitor the validity of their letters of credit and notify Ofgem in advance of expiry and if their issuing bank's credit rating falls below the minimum requirement. The credit ratings are at a level that provide payment certainty, whilst being mindful of the costs to suppliers associated with providing letters of credit.

Q11: Do you agree that credit cover should be lodged on a quarterly basis, (if there is not already sufficient cover in place), in order to cover the upcoming quarterly levy payment?

Consultation proposal

In the consultation, we set out our proposal that gas suppliers will need to have lodged sufficient credit cover with Ofgem, on a quarterly basis if there is not already sufficient cover in place, by a given due date ahead of each levy payment and to keep this at the required level.

Summary of responses

There were 31 responses to this question. Most respondents supported the quarterly frequency of ensuring sufficient credit cover is lodged, some were unsupportive, and a few gave no position. For those respondents that were supportive of the quarterly proposal a few gave reasons including the benefits of aligning the quarterly credit cover provision frequency with quarterly levy payments, including streamlining administrative processes and reducing complexity.

For those respondents who were unsupportive, one suggested a monthly payment cycle and gave some suggestions, such as to reduce the size of possible mutualisation costs. A few suggested a longer annual or six-monthly frequency, arguing that given the number of meter points registered to a supplier is dynamic, small suppliers may find it challenging and costly to lodge credit cover each quarter.

Government response

The government will require gas suppliers to have sufficient credit cover lodged to be at 115% of their upcoming levy obligation, lodged in advance of each quarter. The main rationale for a quarterly credit cover process includes a lower risk for the government and the administrator in recovering funds. This would allow the administrator to respond quicker to gas supplier defaults on lodging cover and/or paying the levy. A shorter time period also decreases the risk of significant mutualisation costs accumulating, avoids suppliers having to lodge large amounts of credit cover at a given point, and reduces the likelihood of a supplier's market share changing significantly during a quarter (compared to six monthly or annually). There are also clear benefits for both the administrator and suppliers with aligning to the quarterly levy payment period, matching the credit cover provision with levy payments, and ensuring the required amount is lodged ahead of each quarterly levy payment due date.

Suppliers may choose to provide credit cover through a letter of credit, which may cover more than one quarter and cover up to one scheme year. Where this is the case, we expect suppliers to notify Ofgem if their letter of credit needs to be reissued in a scheme

year, for instance due to a change in their market share, to ensure they cover 115% of their levy obligation for the next quarter.

Distribution of costs

Q12: Do you agree with our proposal for a flat rate charge for the levy, without tiering, as part of a per meter point levy design?

Consultation proposal

In the consultation, we considered a number of tiering options to ensure that costs more closely reflected gas consumption, which in turn would help reduce the amount paid by low-use gas consumers. However, we determined that there was no implementable tiering system that achieved the goal of materially reducing the impact on domestic gas bills, whilst avoiding significant charges to some low gas consumption businesses. Therefore, we proposed a levy calculated on a flat rate, per meter point, basis.

Summary of responses

Of the 46 responses received, while many respondents were supportive of the flat rate levy proposal, many were also not supportive.

The reasons for supporting the proposal included that: the tiering options had limited cost benefits over a flat rate approach; the proposed tiers created the risk of cliff edges, causing uncertainty for businesses; and the flat rate option was administratively straightforward and quick to implement for suppliers and government, thereby ensuring the levy is launched in time to support the GGSS. Some respondents also agreed that a flat rate would protect businesses from sudden price increases, such as those seen through cliff edges between tiers, which could help aid their recovery from the economic constraints of COVID-19.

Of the respondents in support, a few requested that the government continue to monitor the GGL impacts on bill costs to ensure that if bill prices rise above expected levels, that additional support be provided to more at-risk groups, such as through the Warm Homes Discount (WHD).

For the respondents who were unsupportive of the flat rate proposal, there was no clear consensus on the proposed alternative to a flat rate charge for the levy. The underlying reason for most of these respondents not supporting the proposal was that the flat rate does not reflect the differences in gas consumption across the customer base. Many of these respondents expressed concerns that it was unfair for those in or at risk of fuel poverty paying the same amount as a larger non-domestic business.

There was no clear position on what should be adopted in place of a flat rate levy. A few respondents chose a tiering option, but there was no clear preference. Instead, many respondents argued that, instead of tiering, the GGL should be launched with a volumetric design, or with the intention to transition as soon as possible. The main reason was that it would be better at aligning costs more closely to gas consumption than a tiered approach, meaning that vulnerable households would be better protected from price increases. Some respondents recognised the feasibility issues of launching with a volumetric approach and suggested that tiering be implemented in the transition period. A few respondents also suggested other tiering options to align levy costs more closely with consumption.

Government response

Having considered the views expressed in response to question 12, the government will proceed with the proposed approach of implementing a flat rate 'per meter point' levy, which would see levy costs evenly distributed amongst gas suppliers according to the number of gas meters that they supply. The government is clear that it needs to ensure there is a deliverable levy design that can be in place by autumn 2021 to fund the GGSS. The meter point approach is less complex than a volumetric levy and provides greater certainty to suppliers and consumers. The government recognises the benefits of aligning consumption with levy costs and is actively considering how to address the current feasibility issues to ensure a transition to a volumetric approach for the GGL can happen as soon as possible.

The government recognises respondents' concerns about a flat rate levy design, especially with regards to fuel poverty. Throughout the policy design process, we have modelled several tiering options, including those suggested by consultation respondents. We have found there to be no suitable approach to tiering that is effective in aligning costs more closely to gas consumption, without heavily affecting small, less gas-intensive businesses. Similarly, the approach suggested by a few respondents for increasing the number of tiers provided quite marginal improvements in reducing bill costs and 'cliff edges' between tiers.¹⁷ The government has considered increasing the number of tiers beyond three, including using the EUC bands, as suggested by one respondent. We found that whilst they made small improvements to the bill impacts for some consumers, our intention to transition to volumetric as soon as possible, subject to feasibility issues being overcome, means the savings in the early years would be minimal and add additional complexity for what will be a short period. Given this, we will not be implementing a tiered approach due to the added burden and complexity it creates. The relatively low costs seen in the early years of the scheme before the transition to volumetric also mean the benefits from this will be marginal.

The government understands the strong views of stakeholders on the need to move quickly to a volumetric design and is actively considering how to address the current feasibility challenges to ensure that this transition can happen as soon as possible. Assuming a transition to a volumetric levy design in 2025, bill impacts are expected to peak at around £4.70 by 2028. A full assessment of impacts on consumers will be included in the final Impact Assessment, which will be published following the publication of the government response. The government's policy position on this is set out further in the response to Questions 24-27. The government has further addressed respondent's additional concerns regarding fuel poverty and volumetric in its response to question 13.

¹⁷ Cliff edges occur where there are sizable jumps in the cost of the levy from one tier to the next, where consumers on the edges of those tiers may find their costs increasing or decreasing substantially with little change in their incomes.

Impacts on billpayers

Q13: What are your views on the impact that the GGL could have on billpayers?

Consultation proposal

After setting out the proposed flat rate levy design in question 12, the consultation sought views on the impact that the GGL design could have on gas billpayers. We acknowledged the financial impact the levy could have on fuel poor and the support available to these gas consumers. We also compared this with the impact on gas billpayers under a volumetric levy approach.

Summary of responses

There were 46 responses to this question. A key concern raised by some respondents was that the flat rate levy design would put additional financial pressure on fuel poor and low-income households. A few respondents argued that low income and vulnerable households are more likely to self-disconnect from the grid or self-ration gas use due to difficulties with paying fuel bills.

Another area of concern raised by respondents was that a flat rate levy does not incentivise a change in behaviour. Some respondents argued that launching with volumetric from the start could aid in incentivising gas consumers to adopt greener measures, such as better insulate their homes, and/or reduce the amount of gas they consume. Aligning the levy closely to gas consumption could also reduce low-income consumers' gas bills.

Some respondents used this question to emphasise the additional pressure a volumetric levy could put on non-domestic gas consumers. As mentioned in responses to other consultation questions, there is the concern that pushing up levy prices through a volumetric approach could reduce the competitiveness of non-domestic gas consumers.

A few respondents argued the levy is not high enough and that the impact of the levy and scheme in supporting biomethane injection is not ambitious enough.

Government response

The government recognises the concerns raised by respondents regarding the effect that a flat rate levy could have on low income and vulnerable households. The government is committed to ensuring the impact on consumer bills is as low as possible and that this policy sits in a wider context of a range of policies to tackle fuel poverty. This includes government policies in place for domestic consumers and vulnerable groups in relation to their energy use and bills.

The Warm Home Discount (WHD) scheme supports over 2.2 million low-income and vulnerable households with their energy bills and, following a consultation in autumn 2020, the current scheme will be extended until March 2022. Beyond that, as set out in the 2020 Energy White Paper, the government will extend the WHD to 2026, with increased funding from the current £350 million to £475 million per annum (in 2020 prices) to support around 3 million at risk of fuel poverty – an extra three quarters of a million households compared to the current scheme. Later this year, we intend to consult

on reforms to improve targeting of the scheme. This will likely include proposals to increase the rebate to £150 off energy bills each winter.¹⁸

In addition, given the intention to transition to a volumetric levy, government schemes focused on energy efficiency will become especially important, as a better insulated house will mean less gas is needed to heat the home, likely resulting in lower gas bill costs for the consumer. The updated Fuel Poverty Strategy for England, which was published in February 2021,¹⁹ announced the expansion of the Energy Company Obligation (ECO) which will run from 2022 to 2026, with an increase in value from £640 million to £1 billion per year. It also set out details of new funding of £150 million for the Home Upgrade Grant. The Government is also making £50 million available for social housing through a demonstrator project for the Social Housing Decarbonisation Fund, meaning warmer and more energy efficient homes, a reduction in households' energy bills, and lower carbon emissions. These policies will help as we work toward our statutory fuel poverty targets and ensure that as many poorly insulated homes as is reasonably practical achieve a minimum energy efficiency rating of Band C by 2030.

The government understands the strong views of some stakeholders on the need to move quickly to a volumetric design and is actively considering how to address the current feasibility challenges (see question 25) to ensure that this transition can happen as soon as possible. This will align bill increases more closely to gas consumption and will potentially reduce costs and incentivise consumers to adopt greener heating options and practices. Consideration will be given to assess the impact on non-domestic consumers, in particular gas-intensive industries, as part of the policy design. Any proposed changes will be subject to a consultation.

Further detail on the transition to a volumetric approach to the GGL can be found in the government's response to Questions 24-27.

Budget control and financial management

Q14: Do you agree with the proposed approach to budget control and financial management?

Consultation proposal

The consultation set out the need for a robust cost control framework to provide gas suppliers with certainty about upcoming costs, while minimising the impact of the levy on the bills of their customers.

In addition to the budget control mechanisms set out for the GGSS – including a TG budget cap and an overall annual budget cap – the consultation set out two proposed options for publishing either a maximum possible levy rate or the maximum amount that the levy could collect in one year ahead of the scheme launch. It was stated that these options would provide gas suppliers with foresight of the maximum costs that they can expect to pay under the levy. Respondents were asked to provide their views on these options.

¹⁸ BEIS (2020) [Energy White Paper: Powering out net zero future](#)

¹⁹ BEIS (2019) [Sustainable Warmth: Protecting vulnerable households in England](#)

The consultation also set out proposals for the financial management of the levy. It was set out that payments to biomethane producers under the GGSS would be made on a quarterly basis to cover biomethane injected during the previous quarter. It was stated that this would differ from the process seen under the ND RHI, as biomethane producers would be required to make quarterly data submissions at a fixed date during the quarter.

Summary of responses

There were 30 responses to this question. Of these, most respondents were supportive of the budget control and financial mechanisms proposed in the consultation, while some were unsupportive.

Those respondents that were supportive of the proposals felt that they addressed the need to minimise the risk of unexpected price shocks for consumers. A few of those respondents also requested that biomethane producers be notified if the cap is due to be reached, to allow for investment and timing adjustments.

The reasons for not supporting the proposal included that the annual budget cap restricted the ambition of the GGSS and was likely to be unhelpful for investors in the biomethane industry, while a few respondents opposed the proposals on the basis that they disagreed with the wider rationale and objectives for the GGL.

Most respondents did not set a clear preference regarding the two options for publishing either a maximum possible levy rate (in pence per meter per day) or the maximum amount that the levy could collect in one year (as a fixed total value) ahead of scheme launch. For those that did express a preference, four respondents indicated a preference for publishing a maximum levy rate (in pence per meter per day), as it would aid suppliers when predicting levy costs.

Most respondents did not comment on the proposals to make biomethane payments under the GGSS on a quarterly basis or on the associated proposal to require quarterly biomethane data submissions at a fixed date. Of the three that did, two were supportive of the proposal to move to a fixed quarterly payment cycle, while another suggested that monthly payments would be preferable to maintain a steadier cashflow to biomethane producers.

Government response

Having considered the views expressed for the two approaches to give suppliers foresight of maximum levy costs, the government will publish the maximum levy collection figure (as a fixed total value) in advance of the launch of the GGSS. The mechanism and deadline for calculating and publishing this figure will be stipulated in regulations and will be aligned to the maximum projected budget cap for the GGSS. This approach aligns with the precedent set by the RHI and the GGSS proposals for publishing budget caps rather than setting them in regulations.

We believe that this will provide suppliers with increased certainty about the maximum costs that they can expect to incur throughout the duration of the levy's lifetime. The government believes that publishing the maximum levy collection figure will provide greater certainty compared to publishing a maximum levy rate. Any published maximum levy rate would likely have to be inflated to account for unexpected drops in the number of leviable meter points, making it less useful as an indicator of future costs compared to a maximum levy collection figure, which will not need to account for meter point number variability.

The government recognises the concerns raised by a few respondents regarding the budget cap. As set out in question 36 of the GGSS section of this government response, the GGSS will continue with the proposed TG budget caps broadly as they work on the RHI, as they provide an effective brake on applications in the unlikely event that a large number of applications could lead to overallocation of capacity and therefore overspend.

Furthermore, in line with the consultation proposal regarding financial management, Ofgem as administrator will collect the levy from gas suppliers on a quarterly cycle. The levy will be charged based on a supplier's previous quarter meter point data.

Q15: Do you agree that the backdated payments proposal will provide the necessary certainty for biomethane developers to proceed with applying to the Green Gas Support Scheme during the gap in funding availability?

Consultation proposal

The consultation set out that it is expected the first collection of the levy will not happen until April 2022 and GGSS payments would be made after this date. This is to provide a sufficient notification period to gas suppliers ahead of collection and to allow Ofgem to factor the costs of the levy into their Price Cap for that financial year. The consultation proposed that the gap in funding for any biomethane injected between the launch of the GGSS and levy funding becoming available will be funded by backdating payments to biomethane producers. This is subject to consultation responses on the length of the notice period for gas suppliers on the initial levy rates.

Summary of responses

There were 21 responses to this question. Most respondents supported the backdated payment proposal to cover the time between the scheme launching the levy funding becoming available. Some respondents were unsupportive, and a few gave no position.

Respondents that were supportive of the proposal and noted that it is likely that only a few biomethane projects will be able to commission in approximately the first six months of the scheme and those that do are likely to take time to be ready before commissioning. They also argued that the backdating payment proposal should provide the certainty required for the biomethane industry to invest in the early stages of the scheme and avoid delay in support.

Government response

In line with the consultation proposal, and to provide certainty to the biomethane industry, Ofgem will 'backdate' eligible payments for any biomethane injected by registered biomethane participants from the launch of the GGSS in 2021 until Q1 2022/23. This is due to the first levy collection happening in Q1 2022/23, in order to provide sufficient notice period to suppliers ahead of levy collection after the first levy rates are set. The first payments to biomethane participants will be made by the end of Q1 financial year 2022/23, following the first levy collection in Q1 2022/23. This approach prevents a delay to the launch of the scheme and the levy.

Gas supplier compliance and enforcement

Mutualisation process

Q16: Do you agree with the proposed mutualisation process?

Consultation proposal

We proposed that a mutualisation process could occur after the levy payment due date following any shortfall in levy payments and credit cover. This is to mutualise the costs of outstanding gas supplier levy payments owed by defaulting suppliers.

The consultation set out the intention that any mutualisation costs will be charged to suppliers according to the number of meter points they serve, for the period to which the mutualisation event corresponds.

Summary of responses

Of the 31 responses received to the question on the proposals for a mutualisation process in instances of shortfalls in levy funding and credit cover, many respondents were supportive, some were unsupportive, and a few gave no position. A few of the respondents supportive of the proposal argued for a threshold above which mutualisation is triggered. Many that were supportive noted that credit cover will help mitigate against the need to mutualise.

Government response

Gas suppliers that have partially or not paid the levy will be in default of their levy obligation. Following the levy payment due date each quarter (and any applicable cure period), when an outstanding levy payment remains and there is insufficient credit cover from the defaulting supplier(s), the mutualisation process will be triggered to recover outstanding levy costs, subject to a threshold being exceeded (see below).

When mutualisation is triggered, Ofgem will notify all suppliers with details of the mutualisation process including the outstanding levy amount due, and how much a non-defaulting supplier must pay towards the mutualisation process and by when. An individual non-defaulting supplier's mutualisation contribution will relate to their share of the gas market using the number of meter points that supplier serves for the period to which the mutualisation event corresponds.

In the event of a small shortfall in levy funding that is not covered by the relevant suppliers' credit cover, Ofgem may not trigger mutualisation. This is to reduce the likelihood of triggering mutualisation when Ofgem's administrative costs to run the process are higher than the levy shortfalls, which will reduce the administrative costs and burden that would otherwise be incurred. Instead, headroom may be used to account for small shortfalls in the levy. There will be a threshold for 'outstanding levy payments' above which the mutualisation process is triggered, based on an estimate of the administrative costs for Ofgem to run the process.

The mutualisation process will be triggered automatically when the levy shortfall for a given quarter, following the levy payment due date and credit cover draw down, exceeds the threshold. The conditions as to whether or not mutualisation is triggered after the levy

payment due date will be set out in the regulations and the threshold will be made transparent in advance of a scheme year.

Where a supplier has not made their mutualisation payment by the respective due date, that supplier's credit cover can be drawn down by Ofgem to cover their outstanding mutualisation contribution. In addition, that supplier will pay interest on any outstanding mutualisation payment amount (see late payment interest section from page 69).

Reporting supplier non-compliance and enforcement

Q17: Do you agree with the proposal that Ofgem may report and publish information on non-compliance and enforcement action?

Q18: Do you have any views on how reporting can be used to best contribute to compliance with scheme obligations?

Consultation proposal

The consultation proposed that relevant information regarding gas supplier non-compliance may be reported by Ofgem. This includes outstanding levy payments from gas suppliers, where credit cover is not lodged, and where enforcement action is taken by Ofgem, such as any financial penalties issued. The consultation also proposed that public reporting by Ofgem may be at regular and/or ad hoc intervals.

Summary of responses

Of the 30 responses received to question 17 on the proposals for Ofgem to report and publish information on non-compliance and enforcement action, most were supportive of the proposal, a few were unsupportive, and one gave no position.

Twenty-one responses were received to question 18 on how reporting can be used to best contribute to supplier compliance. Some respondents suggested non-compliance should be publicly reported as soon as possible after a supplier is non-compliant and a few noted the value of reporting if there is a clear escalation process afterwards, such as Ofgem issuing fines.

Most respondents to both questions (17 and 18) were supportive of the use of public reporting, agreeing that it would aid with deterring non-compliance and that it is in line with other government schemes and gave examples where such reporting has been effective under the CfD scheme. A few suggested that an annual report should also be published to summarise Ofgem's decisions and actions in the event of non-compliance over the year.

Government response

Ofgem will publicly report relevant information as soon as possible after incidents of gas suppliers being non-compliant, such as in relation to non-payment of the levy including credit cover, or a mutualisation payment. This information will likely include the amount of a gas supplier's outstanding levy payment and/or credit cover, and/or mutualisation payment. Reporting of missed levy payments including any credit cover will provide transparency and assist suppliers in planning for possible mutualisation events, by providing visibility and warning of outstanding levy payments in relation to the threshold

required to trigger mutualisation. Ofgem may also report enforcement action, such as any financial penalties issued.

Where levy payments and/or credit cover are not lodged and/or mutualisation payments are not made by the respective due dates within the applicable cure period, the supplier will be in default, and Ofgem will notify the supplier of this. The government is aware of the importance of having a robust assurance process in place to ensure that when information on defaulting suppliers is published by Ofgem, it is current and correct. Where a payment is subsequently made after public reporting and the defaulting supplier's obligation is met, the information reported will remain, but it will be updated to say the non-payment has been made, the breach has been rectified, and the supplier is no longer in default.

Interest on late payments

Q19: Do you agree with the proposed approach to applying interest to late payments?

Q20: Do you agree with the proposed range of interest applied to late payments?

Consultation proposal

The consultation proposed that where gas suppliers are late in making key payment such as not paying their levy contributions in full by the levy payment due date, that those suppliers are charged interest on outstanding payment amounts. It also proposed that this interest may apply automatically after missing a key payment deadline.

The consultation also proposed an annualised interest rate will be in the range of between 5% and 8% above the Bank of England base rate, which is in line with other government energy levy schemes and network code charges.

The consultation set out the intention that any mutualisation costs will be charged to suppliers according to the number of meter points they serve, for the period to which the mutualisation event corresponds.

Summary of responses

Most of the 29 respondents supported the proposed approach set out in question 19. They felt that it would be an active deterrent against late payments such as for the levy, and ensure funding was available for the GGSS.

Of the few respondents that did not support the proposal in question 19, the main concern was that such interest on late payments will not be as effective where suppliers are struggling to make payments.

Of the 26 respondents who replied to question 20, many supported the interest range proposed, and some were unresponsive. For the respondents that supported the proposal, most agreed that the proposed range was penal enough to deter non-compliance and that it aligns with other government schemes. Of those that set a clear preference for which late payment interest rate should apply, two were in favour of the 5% interest rate, whilst three gave a preference for the higher 8% interest rate above the Bank of England base rate.

Of those respondents that did not support the proposed range, there were a few concerns that in the current economic climate the interest rates proposed on late payments could put additional financial pressure on defaulting suppliers.

Government response

In line with the consultation proposal, interest on late payments, including late levy, financial penalty, or mutualisation payment amounts, will apply automatically.

If a gas supplier fails to pay Ofgem all or part of their levy payment, financial penalty, or mutualisation payments by the respective due date, the interest will accrue on a daily basis, from the day the payment was required, until the outstanding payment is made.

The government has decided that the annual late payment interest rate will be set at 8% above the Bank of England base rate, as the higher interest rate will act as an effective deterrent for late payments.

Financial penalties

Q21: Do you agree with the proposed approach for Ofgem to issue financial penalties, including the proposed maximum limit?

Q22: What do you consider the maximum fine should be where a supplier has either low turnover or no turnover at all?

Consultation proposal

We proposed a maximum financial penalty limit of 10% of a licenced gas supplier's turnover, which is in line with other schemes that Ofgem administers. In the event of non-compliance, we proposed the level of each penalty issued to non-compliant suppliers would be set at Ofgem's discretion according to the nature and severity of the case.

We proposed having an additional financial penalty maximum limit for cases where a gas supplier has either low turnover or no turnover.

Summary of responses

Of the 30 responses received for question 21, most respondents were supportive of the proposed financial penalty option, agreeing that it was in line with Ofgem's enforcement powers in other schemes. Arguments in favour of financial penalties included consistency with other schemes administered by Ofgem, and that penalties are an effective tool in deterring non-compliance and taking action in instances of supplier non-compliance.

There were concerns raised by a few respondents that the maximum fine of 10% of a supplier's annual turnover is high.

Furthermore, a few respondents argued that financial penalties are not always an effective deterrent in all cases, with them expressing concerns that if a supplier is in default of its levy payments, there is a high risk of not being able to pay their financial penalty.

Of the 23 responses received for question 22, on what the maximum fine should be when a supplier has little to no turnover, some respondents stated that the financial penalty should be

proportionate to the levy amount paid by the supplier. A few respondents offered a range of methods for determining the fine for a supplier with low or no turnover, including calculating it based on the number of meter points and using the previous year's profits as a guide.

Government response

Having considered the views expressed for question 21 and 22, the government intends to continue with the proposed approach of implementing a financial penalty of up to 10% of a licensed gas supplier's annual turnover in the event of non-compliance. This maximum limit is consistent with financial penalty limits set in other government schemes, including the RO, FITs and ECO. This will not include any additional maximum penalty limit other than the percentage basis we have outlined.

The government recognises the concerns raised in question 21, that a financial penalty may not work in all cases, such as for a supplier that is struggling financially. However, Ofgem will be reviewing each instance of non-compliance on a case-by-case basis.

Q23: Do you have any views regarding the pursuance of debts through the courts by Ofgem?

Consultation proposal

In the event of a gas supplier being in default of a levy payment or financial penalty, we proposed that Ofgem will have the discretion over whether to pursue any such non-payments as a debt in the civil courts, through seeking a court order.

Summary of responses

Of the 21 responses received, all but one was supportive of Ofgem having the ability to pursue civil debts through the courts. Respondents supportive of the proposal agreed that it was an appropriate course of action to pursue supplier debt when other compliance and enforcement mechanisms have been unsuccessful. Although a few respondents were supportive of the proposed approach, they had concerns that in the event of a supplier claiming insolvency, that Ofgem would be unlikely to be able to collect the funds.

The respondent that did not support the proposal felt that the existing enforcement and compliance process would be sufficient.

Government response

Where a gas supplier is in payment default, Ofgem will have the power to recover specific unpaid amounts as a civil debt through the courts. The main examples of civil debts could include where an outstanding amount, in relation to a gas supplier's quarterly levy obligation, is not paid by a given due date, and any financial penalties that are outstanding.

Future considerations for the Green Gas Levy

A volumetric approach to levy design

Note: There is a combined government response for Questions 24-27 at the end of this section.

Q24: Do you agree with more closely aligning levy costs with consumption through a volumetric approach, as the scheme develops?

Consultation proposal

The consultation set out the benefits of a levy that is charged on a volumetric basis, which would ensure that the costs of the levy are more closely aligned to gas consumption. If suppliers pass on costs in the same way that they are charged, under a volumetric levy, smaller gas consumers would see a reduction in the impact of the levy on their gas bills. It would also mean that the largest consumers of gas would contribute a greater share.

In our proposals, we set out the preference for launching with a per meter point design, which is less complex, provides greater certainty on costs to consumers and could be delivered by autumn 2021. This is important as it will minimise the hiatus in support for biomethane production from the close of The ND RHI on 31 March 2021. However, it was stated that it is the government's intention to transition to a volumetric levy in 2024/25, or as soon as possible thereafter, subject to the current feasibility issues being overcome. The policy design will need to avoid distortive effects and disproportionate burdens on market participants and maximise fairness for consumers. It was proposed that any changes to the levy design would be subject to a public consultation.

The consultation acknowledged that, as a volumetric levy would tie levy costs more closely to gas consumption, non-domestic gas users with a higher gas usage would consequently see a higher cost impact on their bills compared to their costs under the meter point approach. This would be particularly true for ELLs. Therefore, consideration would need to be given to specific impacts on ELLs as part of the policy design.

Summary of responses

There were 46 responses for this question. Some respondents supported the proposal to transition to a volumetric approach to levy design as the scheme develops, while some respondents were unsupportive of such a transition.

Those respondents that supported the proposal did so primarily because they felt it would result in a fairer distribution of costs between gas consumers compared to the per meter point levy design, with a common point being raised (including by those who responded "No" to this question) that the levy should launch with the volumetric approach or transition sooner than 2024/25.

Those respondents who agreed with launching with a per meter design and transitioning to a volumetric design, when feasible, emphasised that it was crucial that gas suppliers receive plenty of notice ahead of any changes.

Of the respondents that opposed the proposal, a recurring theme was that the per meter point levy design provided greater certainty regarding costs to suppliers and consumers and was less complex to administer. A few respondents also raised concerns about the disproportional

impact that a volumetric approach might have on ELLs and key British industries. A few other respondents reiterated their preference for a tiered meter point approach to provide certainty and simplicity for consumers.

Q25: Which of the three options set out in the consultation would be the most suitable for designing a volumetric levy?

Consultation proposal

The consultation stated that a volumetric approach would see gas suppliers levied according to an estimate of the amount of gas consumed by their customers. We set out three possible approaches for a volumetric design:

1) **Volumetric based on consumption data (meter readings)** - This approach would involve charging the levy based on actual consumption, using data from the gas settlement process. Where daily meters are in place, this accurate daily data would be used, and levy allocations settled quickly. However, for non-daily sites, levy charges would initially be based on estimates of consumption, which would then be reconciled when meter readings are submitted.

2) **Volumetric based on a combination of Formula Year Annual Quantity (FYAQ) and consumption data** – Certain classes of gas meter – those with non-daily (NDM) readings – have a FYAQ assigned to them, which is the estimated annual consumption of that meter point, with adjustments only allowed in rare circumstances. This is a measure of estimated annual consumption for that meter based on historical metered volumes and adjusted to the seasonal normal demand.

3) **Volumetric based on Supply Meter Point Annual Quantity ('Rolling AQ')** – This approach is based on the Rolling AQ, which – unlike the FYAQ – is updated monthly based on the receipt of meter readings. The consultation stated that under this approach, the levy charge could be calculated for each supplier based on the updated Rolling AQ for all the meters that they supplied during that month or quarter, rather than being fixed for the year.

In the consultation, it was noted that there are several risks and challenges associated with each of these approaches, which will need to be overcome ahead of any transition to a volumetric approach. The key challenges, as set out, are:

- Up to three-year settlement tail on gas volume data, which could require multiple reconciliations that would likely be complex and administratively burdensome.
- Seasonal and year-on-year variations in gas consumption, which could lead to the GGL under or over collecting due to the need to set the levy rate based on forecasts of gas consumption.
- Consumption proxies, including the FYAQ and Rolling AQ, which may not match actual gas consumption. This could lead to accounting difficulties and a greater potential for administrative errors.

Summary of responses

There were 33 responses to this question. There was no clear consensus amongst respondents about the preferred option for designing a volumetric levy. Some respondents preferred Option 1; a few supported Option 2; a few supported Option 3; a few expressed no clear preference; some opposed all of the options; and a few suggested an alternative approach.

Those respondents that supported Option 1 commonly stated that it would provide the closest alignment of levy charges to actual gas consumption and would therefore be the most accurate, simple, and fair approach. Those that preferred Option 2 felt that it was the best alternative to address the issues identified with the long settlement tail for gas volumes and therefore avoided the needed for reconciliation. Respondents supportive of Option 3 generally felt that it struck the right balance between actual gas consumption and simplicity of approach.

Stakeholders have put forward a number of suggestions that may be helpful to overcome the challenges that will need to be addressed before a volumetric approach can be implemented. A number of stakeholders suggested an approach where each gas suppliers' contribution would be calculated by using their market share as determined by the proportion of gas that they have supplied compared to the total gas market sale volumes for that period. These respondents felt that this could help to manage the risk of under-or over-recovery of funds (e.g. due to the variability in gas demand) rather than this being internalised within the scheme.

A number of respondents also pointed to precedents from electricity levy schemes for applying a cut off to settlement for the purposes of closing off a scheme year. It was felt by these respondents that this principle could be applied to the GGL to address the issue with the long settlement tail and the need for multiple reconciliations.

The idea of charging suppliers based on historical gas supply data was also put forward, which it was felt could address the issues highlighted with relying on forecasts of gas demand.

The respondents that opposed all of the options primarily did so out of concerns that any volumetric approach would have a significant impact on ELLs and British industrial gas consumers. Of those respondents that suggested an alternative approach, a tiered meter point approach was the most common alternative suggested.

Q26: Are there any feasible alternatives to the proposals set out in the chapter for achieving a levy that is proportionate to gas volumes?

Consultation proposal

In the consultation it was noted that the government is conscious that many of the practical challenges for the delivery of a volumetric approach stem from the nature of a levy on gas suppliers, and that there may be alternative ways to levy on gas volumes that avoid this. Respondents were asked to provide views on such alternative approaches and evidence of their advantages, where possible.

Summary of responses

There were 30 responses to this question. Some respondents agreed that there were feasible alternatives to the proposals set out for achieving a levy that is proportionate to gas consumption volumes, while some did not agree that there were any feasible alternatives.

There were several common alternatives suggested by those who agreed. They were primarily for a commodity charge placed on the National Grid and/or the Gas Distribution Networks rather than on gas suppliers; or for a Climate Change Levy (CCL) style charge, or an amendment to the existing CCL to cover GGSS costs.

Of those respondents that said that there were no feasible alternatives, several reiterated their preference for the per meter point design over any volumetric approach, while another

common answer was that the respondent supported one of the listed options for a volumetric approach.

Q27: How could we ensure that a volumetric levy is designed in a way that promotes a competitive gas supplier market and minimises costs, administrative burden, and other impacts on suppliers?

Consultation proposal

The consultation stated that the GGL should be designed in a way that minimises the burden on the supply market to protect consumers from any market instability. Maintaining a competitive market, which can be navigated by gas suppliers, without them facing excessive financial risk, is a key part of developing a market that better serves consumer interests.

The consultation also proposed that consideration should be given to providing certainty to gas suppliers and consumers to mitigate the impact on suppliers' finances and cashflow from the levy under the volumetric approach. It is likely to be beneficial for a possible volumetric approach to have consistent levy collections split equally across each quarter, rather than reflecting the seasonal differences in gas usage.

Summary of responses

There were 32 responses to this question. The most common theme in the responses was that any volumetric approach should emphasise simplicity of design to minimise the administrative burden on suppliers. Respondents were also clear that any design should minimise costs which may be passed on to consumers. Several respondents also made it clear that gas suppliers need to receive sufficient notice ahead of any transition to a volumetric approach with clearly communicated timelines, regulations, and guidance.

Some respondents reiterated their preference for a volumetric levy approach over a per meter point design, and a few of these respondents argued for a volumetric approach from the outset.

A few respondents highlighted the need for EII exemptions under a volumetric approach in order to avoid the impacts that it could have on industrial competitiveness, particularly in the international market.

Government response to Questions 24-27

The government recognises the clear benefits of a volumetric levy that aligns policy costs more closely with energy consumption and acknowledges the strong representations to launch the scheme with a volumetric design.

While there have been several useful suggestions on how to address some of the feasibility challenges identified with a volumetric levy on gas suppliers a key theme of the responses received is that there is no clear consensus for any of the three options set out above for a volumetric levy design. In addition, EIs raised concerns that the GGL could adversely affect their competitiveness if charged according to gas consumption volumes.

The government will launch with a per meter point levy, which is less complex to administer and provides greater certainty to suppliers and consumers on costs. Any

significant delay to the launch of the GGSS would result in lost carbon savings, damage to the biomethane industry and job losses.

The government is committed to protecting consumers and minimising energy costs for businesses to ensure our economy remains strong and competitive as the energy system decarbonises. In determining the design of a volumetric approach, the government will take into account the distributional impact of the levy on all bill payers. In a call for evidence on affordability and fairness that will be published shortly, we will be seeking views on wider considerations related to policy costs, including views on EII competitiveness.

In the consultation, the government set out its intention to transition to a volumetric levy in 2024/25, or as soon as possible thereafter. The government understands the strong views of some stakeholders on the need to move quickly to a volumetric design and is actively considering how to address the current feasibility challenges to ensure that this intended transition can happen as soon as possible.

Having considered consultation feedback, the government intends to work closely with stakeholders going forwards to explore and refine its approach for delivering a workable volumetric levy. These approaches could include but are not limited to:

- a levy charged at a p/MWh rate based on volumes of gas supplied, with headroom incorporated into the levy rate to account for the variability in gas demand; and
- setting the size of the levy to be recovered according to a supplier's market share in terms of the volume of gas they supply, with suppliers responsible for managing the recovery of the fixed scheme costs.

For these options, and any others that may be considered, we will also explore whether a cut-off could be applied to gas settlement to address the issue of long settlement tails, which follows the precedent set by some renewable electricity support schemes.

While we are clear in setting out our intention to transition to a volumetric levy as soon as feasibly possible, we acknowledge the concerns raised by those who did not support our intention to transition to a volumetric design, for example on the basis that a per meter approach is less complex to manage. We are clear that any volumetric levy design must be simple to administer and deliver, minimise costs on consumers, and take consideration of the impact on EIIs and other important UK industries. The government will ensure it consults fully on any new proposals in this area.

Next Steps

Following the government response, the government will introduce regulations to deliver the GGSS and GGL.

This publication is available from: www.gov.uk/government/consultations/future-support-for-low-carbon-heat

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