

Kevin Brady
Business Energy Gas Policy Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2
D02 X285

29th October 2021

Re: Consultation on the Introduction of a Renewable Heat Obligation

Sent via email: RenewableHeat@decc.gov.ie

Dear Kevin,

Bord Gáis Energy (BGE) welcomes the opportunity to respond to this consultation. We support the low carbon transition and are keen to play our part by helping customers along a decarbonisation journey.

We believe renewable gas can play an important role in Ireland's climate action response, a view that is shared by the Commission for Regulation of Utilities (CRU). In a recent Information Note on Security of Supply¹ CRU emphasised the need for flexible gas-fired generation to support security of electricity supply. CRU also highlighted the importance of decarbonising the gas network which can be used to provide renewable heat. Electrification and energy efficiency alone will not allow Ireland to reach net-zero and it's vital that additional renewable heat sources such as biomethane hydrogen are encouraged. To secure a stable supply of green gas that will support the decarbonisation of electricity and heat, policy intervention is now needed to develop Irish biomethane and hydrogen sectors.

While we encourage further policy measures to increase renewable heat, we are not supportive of the Renewable Heat Obligation (RHO) being introduced in isolation. Additional policy measures are needed to develop Irish green gas industries in order to meet the Department's objectives. On its own, the RHO as is unlikely to deliver the desired targets in the gas sector, particularly in the near-term, due to:

- **Limited Near- Term Domestic Supply:** Although hydrogen projects are under development, they have yet to be delivered meaning biomethane injection will be needed for the early years of the proposed RHO scheme. Yet, biomethane injection rates remain very low. Approximately 2 GW^h² of biomethane was injected to the gas grid in 2020, compared to 110 GW^h that would be needed to fulfil the RHO in 2023. Given the lead-time for delivering biomethane projects, it won't be feasible to deliver the required volumes by 2023. It may be possible for supply to increase in the medium-term to meet demand, however, additional policy supports will be needed to encourage investment.
- **Inadequate Investment Signals:** The RHO does not deliver adequate investment signals for biomethane and hydrogen as it does not guarantee a minimum price that provides an

¹ See CRU Information Paper- Security of Electricity Supply – Programme of Actions [here](#)

² Source: GNI- calculated based on 1 GWh receiving certification from May- October 2020

appropriate return on investment. Also, given the high levels of capital required, a return would be required over a medium to long-term period. The RHO is proposed to run from 2023-2030, allowing only short-term certainty for a return on investment which make impact the case for investment. In addition, the RHO fails to provide reliability to investors who will need to rely on contractual agreements with Obligated Parties that may be subject to change depending on demand and market conditions.

We recommend a Feed in Tariff (FiT) as a suitable alternative based on experience from other European countries that have been successful in increasing supply of green gas³ and bearing in mind Ireland's positive experience in incentivising renewable electricity. A FiT provides investors with a reliable, minimum source of revenue over a medium-term period. The certainty that a FiT provides will encourage capital investment and will help to secure increased green gas supply. The FiT could be funded by the carbon tax or a separate Green Gas Levy (like the Public Service Obligation). We recognise that State Aid would be required for a FiT. However, the time taken to secure State Aid approval should not be a blocker given the need to create the right market conditions to successfully meet increasingly ambitious climate targets.

If a FiT is not delivered, we believe a poor investment conditions will persist, and low indigenous green gas supplies will remain. As there will be insufficient domestic supply for Obligated Parties to comply, Obligated Parties may be forced to purchase Guarantees of Origin (GOOs) for renewable heat projects abroad. If the purchase of GOOs is allowable it would result in Irish customers subsidising decarbonisation of heat in other jurisdictions without benefitting from lower carbon heat in Ireland. Given that GOOs are precluded from being counted towards Ireland's Renewables Directive targets, additional policy measures may be needed to address any shortfall which would come at an added cost to consumers. While we would support some flexibility in allowing a proportion of GOOs to be purchased, we believe the purchase of GOOs to fulfil all/ the majority of the RHO is a sub-optimal and inequitable approach to decarbonisation. Allowing GOOs to be purchased in high volumes may increase energy prices unnecessarily and should be avoided.

Overall, we consider it very challenging to meet the RHO requirements in the near-term and a longer lead-in time may be needed to implement the RHO and to consider additional policy measures such as a FiT. We agree with the Department's proposal to hold another, more detailed consultation before coming to a decision on a way forward. However, we ask that further economic analysis is appended to upcoming consultations. It's vital that the cost of any RHO scheme is well understood and represents value for money given the potential impacts on energy prices.

We hope that you find our response to this consultation useful and would be happy to discuss our views and recommendations further. If you require any further detail or clarification, please feel free to contact me.

Yours sincerely,

Gillian Kinsella

Senior Regulatory Affairs Manager, Bord Gáis Energy

³ See European Commission Optimal use of biogas from waste streams- An assessment of the potential of biogas from digestion in the EU beyond 2020 report [here](#)

Appendix- Consultation Questions & Answers

Q1: Do you think that a Renewable Heat Obligation is an appropriate measure to introduce?

Yes. However, due to various challenges in delivering targets under the RHO, BGE does not agree with the RHO being introduced in isolation. Additional policy measures are needed to achieve the desired targets. We suggest a FiT that is supported by carbon tax funding or a Green Gas Levy. In the absence of a FiT, we are concerned that there will not be enough domestic supply to meet demand and Obligated Parties will be forced to purchase GOOs from abroad. Purchasing credits from abroad would result in cross- subsidisation of decarbonisation efforts in other countries. As a result, there may be an unnecessary increase in energy prices without any carbon benefits.

The RHO is designed to incentivise delivery of renewable heat to each of the proposed sectors. In the gas sector renewable heat can be delivered by blending biomethane and/or hydrogen in Ireland's natural gas grid. However, there are various challenges with delivering the required volume of renewable heat under the proposed RHO and within the timelines suggested in the consultation. These challenges include:

1. **Limited Near-Term Domestic Supply:** Long lead-times for hydrogen projects mean delivery is expected towards the end of the decade leaving biomethane blending as the only option for delivering renewable heat directly to gas customers in early years of the proposed RHO. Ireland has the highest potential for biomethane per capita across EU Member States given strong availability of feedstocks⁴. However, only a portion of this potential will be economically viable and currently there are low levels of indigenous biomethane available. There was approximately 2 GW_h⁵ of biomethane injected to the gas grid in 2020, compared to 110 GW_h that would be needed to fulfil the RHO in 2023. Given the lead time for commissioning Anaerobic Digestion facilities we are concerned that there will not be enough biomethane supply to meet the targets in the early years of the RHO. Equally, we are also concerned that adequate indigenous supply will not be available in the longer term if additional supports are not put in place.
2. **Inadequate Investment Signals:** The RHO does not provide reliable investment signals to ensure an adequate supply of biomethane and hydrogen. Biomethane and hydrogen production require high levels of capital investment. The RHO fails to create investor confidence as it does not help to secure a minimum price for biomethane/ hydrogen that delivers an acceptable return on investment. Given the high levels of capital, a return would be required over a medium to long-term, typically a period of 15 years or longer. However, the RHO is proposed to run from 2023-2030 providing only short-term certainty for a return on investment. The RHO also fails to provide reliability to investors who will need to rely on contractual agreements with Obligated Parties which may be subject to change based on market conditions and demand.
3. **Limited Availability of Injection Sites:** If the investment signals are addressed, Ireland may experience a sizeable and rapid increase in green gas injection to the grid. However, we are concerned that there may be capacity issues. While we understand that there are various sites at pre-approval stage, there is currently only one direct biomethane injection site in the Republic of Ireland. A co-ordinated approach is needed to ensure injection facilities can be rolled out quickly to meet growing demand.

⁴ See reference 1 for source material

⁵ Source: GNI- calculated based on 1 GWh receiving certification from May- October 2020

4. **Competing Demand for Biomethane & Associated Feedstocks:** A proportion of the Republic of Ireland's biomethane supply is currently transported for us in Northern Ireland. Without further financial supports for biomethane use in the heat sector in the Republic of Ireland, pre-existing demand for biomethane in Northern Ireland may present a challenge for Obligated Parties in securing supply at a reasonable price. Also, competing requirements for biofuel in the transport sector may result in challenges to securing economically viable feedstocks
5. **Comprehensive Policy Changes:** Increases in future indigenous biomethane supply not only requires energy policy changes; agricultural policy changes are also needed. A significant volume of Ireland's future biomethane supply is expected to be based on grass silage⁶ which will necessitate engagement with the farming community to ensure the right incentives are put in place to adjust farming practices i.e., reduction in pastoral farming. The RHO consultation paper does not cover wider policy changes appropriately. We ask the Department to address agricultural policy changes in future RHO consultations. Further work is also needed to understand what volume of feedstocks will be available considering only some will meet the Renewables Directive sustainability criteria.
6. **Formal Certification Scheme Needed:** While Gas Networks Ireland (GNI) has been operating a certification scheme in an informal capacity, we welcome the fact that the Department is due to formally assign GNI as the renewable gas issuing body in an upcoming Clean Energy Package Statutory Instrument. Delivery of a formal certification scheme is a key component of any renewable heat policy mechanism.

We believe it is best to foster indigenous sources of green gas and that policy measures to encourage Irish biomethane and hydrogen should remain the priority. However, due to the issues outlined above, we are concerned that sufficient green gas supply will not be available to comply with the RHO. With an absence of domestic supply and because of the lower cost of purchasing Guarantees of Origin (GOOs) for renewable heat projects abroad, Obligated Parties may be forced to purchase GOOs. Purchasing GOOs would help Obligated Parties to comply at 'least cost' for its customer base as well as retaining competitiveness. Yet, it is unclear in the consultation document whether purchasing GOOs is allowable under the scheme; we ask the Department to clarify this point in any future consultations on this topic.

If purchasing GOOs is allowable, it's important to be aware of the following issues:

1. **Cross-Subsidisation of Decarbonisation:** Irish customers would be subsidising decarbonisation of heat in other jurisdictions without benefitting from lower carbon heat in Ireland. While we would support some flexibility in allowing a proportion of GOOs to be purchased to comply with the RHO requirements, we believe the purchase of GOOs to fulfil all/ the majority of the RHO is a sub-optimal and inequitable approach to decarbonisation. Allowing GOOs to be purchased in high volumes may increase energy prices unnecessarily with no carbon abatement benefits for Irish consumers
2. **Challenges in Meeting Renewables Directive Targets:** Ireland has a variety of targets to meet under the Renewables Directive. Under Article 3 Ireland is required to increase renewables across the electricity, heat, and transport sectors. Ireland also has a specific 1.3% renewable heat target under Article 23. Given the potential cost associated with implementing the RHO, it's important that it contributes meaningfully towards national and European climate goals. If GOOs are purchased from abroad cannot be counted towards

⁶ See SEAI Bioenergy in Ireland 2015-2035 report [here](#)

Ireland's Renewables Directive targets given it is precluded under Article 19(2) of the Directive. Unless a 'statistical transfer' can be agreed with another Member State, the Irish government would be forced to introduce further policies to ensure Ireland meets its targets. These additional policies would come at an added cost to consumers. We believe this approach would be sub-optimal as it would effectively result in consumers incurring the cost of carbon abatement in the heat sector twice.

3. **Loss of Domestic Co-Benefits:** Subsidising the decarbonisation of heat abroad would mean that Ireland would not avail of the:
 - a. Economic benefits associated with developing indigenous green gas industries including employment etc. and the value associated with by-products such as digestate
 - b. Circular economy and environmental benefits which results in i) reduced waste disposal⁷ ii) avoided greenhouse gas emissions and iii) increased recycling

Q2: If not, what alternative measures would you consider appropriate to increase the use of renewable energy in the heat sector?

BGE believes an RHO could be workable if it is complemented by additional policy measures to develop the domestic green gas industries needed to deliver increased volumes of renewable heat. We suggest a FiT that is carbon tax or Green Gas Levy- funded. Without additional measures, we are concerned that Irish consumers will cross-subsidise decarbonisation efforts in other countries without any domestic carbon abatement benefits (as explained in detail in response to question one).

European countries such as France, Denmark, Italy, and the UK experience the highest rates of biomethane injection to the grid. These countries have been successful in increasing the supply of green gas⁸ because of the availability of government supports to encourage investment i.e., a FiT that provides a minimum price to investors over a 15–20-year period. Based on this successful experience and bearing in mind Ireland's positive experience in incentivising renewable electricity we recommend a Feed in Tariff as a suitable alternative

A FiT provides investors with a reliable, minimum source of revenue over a sufficient timeframe that ensures a return on investment. The certainty that a FiT provides will encourage capital investment where needed and will help to secure increased green gas supply. The FiT could be funded by the carbon tax or a separate Green Gas Levy (like the Public Service Obligation). Introducing green gas should be done at least cost to Irish consumers, where feasible funding should be accessed from Europe.

We recommend that the FiT covers both biomethane and hydrogen. Provision of green gas capacity could be provided via auction with a variety of relevant criteria e.g., sustainability of feedstocks, grid injection etc. for biomethane and flexibility services etc. for hydrogen. We would encourage the Department to consider how the FiT might complement policies intended to support hydrogen sector development that are expected to be published in the Hydrogen Strategy scheduled for release in late 2022.

⁷ See International Energy Agency -The Role of Anaerobic Direction and Biogas in the Circular Economy report [here](#)

⁸ See European Commission- Optimal use of biogas from waste streams- An assessment of the potential of biogas from digestion in the EU beyond 2020 report [here](#)

We recognise that State Aid would be required for a FiT. The time taken to secure State Aid approval should not be a blocker given the need to meet increasingly ambitious climate targets.

Q3: Do you agree that the obligation should apply to all non-renewable fossil fuels used for heating as set out above?

Yes. We agree with the proposed coverage of fossil fuel types.

Q4: It is intended that electricity used for heating purposes and renewable/waste district heating systems would be exempt from this obligation, do you agree with this approach?

Yes. We agree with this approach given that electrical heat is approximately 40% renewable at present and expected to be 70% renewable by 2030 under Climate Action Plan targets.

As district heating systems are derived from waste heat, we believe it is acceptable to exempt district heating.

Q5: Do you agree that the portion of fossil fuel input used in CHP plants to generate heat would be considered to be part of the obligation?

No. CHPs typically use fossil fuels to generate electricity and any waste heat is subsequently used as a heat supply. In the same way that district heating is proposed to be exempt from the RHO we believe CHPs, particularly high efficiency CHPs, should be excluded given that heat is typically generated based on waste heat.

Also, it would be administratively burdensome to estimate volumes of fuels used in CHPs specifically for heat purposes as energy suppliers do not have access to the necessary data. Any attempts made to estimate figures may be inaccurate if suppliers face difficulties in accessing the relevant information from customers. Gas supplied to customers with CHPs should be classed for electrical purposes for the purpose of the RHO.

We understand that data centres are increasingly considering CHPs for on-site generation due to challenges in securing grid connections, given a sizeable volume of gas supply would be used for electrical purposes in this case, it would be distortive to class this for heat purposes under the RHO.

Q6: Are energy suppliers the most appropriate bodies to become the obligated parties in the heat sector?

Yes.

Q7: Is the 400 GWh of energy supplied an appropriate level for a supplier to become obligated?

No. We do not support the 400GWh threshold as it means that customers of larger suppliers will bear the cost of bringing renewable gas onto the gas grid, yet all customers, including those of smaller suppliers will yield the benefits of consuming renewable gas that is distributed to all customers. We do not feel this is an equitable approach. The use of revenues from a Green Gas Levy/ carbon tax/ to incentivise green gas coupled with an RHO for all gas suppliers would be most appropriate as it would be applied equally to all customers ((see response to question two for further detail).

In addition, as existing schemes like the Energy Efficiency Obligation Scheme already apply to larger suppliers only, we do not feel it is appropriate to add further schemes which creates a greater divergence in the cost bases between larger and smaller suppliers.

Q8: Do you agree with the 2023 start date for the obligation?

No. We think it will be very challenging to comply with the RHO from 2023. We suggest the implementation date is delayed so that:

- Appropriate supplementary measures such as a FiT are introduced
- Anaerobic Digestion plants/Hydrogen facilities can be developed to meet demand

If gas suppliers are not allowed to use GOOs/credits from abroad to comply with the RHO, we do not think it will be feasible or appropriate to introduce the scheme as early as 2023. Given the lack of adequate biomethane supplies to satisfy the requirement, we think it's likely that there will be a significant and unnecessary increase in the price for biomethane in the short term which will ultimately be paid by gas consumers. In addition, any shortfall in volumes may be subject to a penalty which also may result in unnecessary price impacts for customers. These potential negative impacts on consumers can and should be avoided.

Q9: In terms of the obligation rate, do you agree with the proposed initial level of obligation of 0.5%?

Yes. We agree with 0.5% as an introductory obligation rate provided that further policy measures are introduced to encourage an adequate supply of domestic renewable heat for the gas sector.

Q10: In terms of ambition for a 2030 target, what level of ambition do you think is appropriate?

3% minimum/5% medium ambition/10% higher ambition/ Other?

Given supply challenges with biomethane and the lack of clarity on the volume of hydrogen that might be available by 2030 we agree with 3% is an appropriate obligation rate provided that further policy measures are introduced to encourage an adequate supply of domestic renewable heat for the gas sector.

Q11: Do you agree with the first obligation period being multiple years 2023-2025 to give the industry time to develop supply lines?

Yes, we agree with the concept of multi-year compliance in the introductory years of the RHO. However, we believe the implementation timeline needs to be delayed.

Q12: Once the first period 2023-2025 expires, do you agree with the obligation then becoming an annual obligation?

Yes, we think this is an appropriate approach.

Q13: Do you agree with suppliers being able to trade credits in order to meet their obligation?

Yes, trading of credits allows flexibility to assist with compliance which has proven effective in similar schemes such as the Energy Efficiency Obligation Scheme. We believe trading of credits should be allowed for a proportion of the obligation. However, as explained above we do not believe that purchasing credits in full/ large volumes from another country or sector is in the best interests of customers nor does it align to climate policy objectives which encourage decarbonisation on a sector-by-sector basis.

Further information is needed on the nature of the credits and rules associated with trading; we ask that this is subject to a further public consultation.

Q14: Do you agree with allowing 10% carry over of renewable credits to be used in the following year's obligation?

We do not agree with this approach as there is no justification for setting the limit at 10%. In our view, there should be no limit to the volume of credits that can be carried over.

Q15: What are the sustainable energy sources likely to meet the Renewable Heat Obligation at an obligation rate of (i) 3%, (ii) 5%, (iii) 10% by 2030?

Renewable heat on the gas grid can be delivered using biomethane and hydrogen.

Q16: Will there be enough sustainable indigenous supply to meet this demand?

We are concerned that there will not be enough indigenous supply of biomethane and hydrogen in the required timelines to meet demand. There was approximately 2 GW⁹ of biomethane injected to the grid in 2020, compared to the 110 GW⁹ that would be needed to fulfil the RHO in 2023 under current proposals. Further policy measures are needed to ensure the right signals to investors to increase supply. See response to questions one and two for further information.

Q17: Do you agree that for renewable fuel delivered directly to a consumer that this will be the point of supply?

Yes. This question relates to section 10.7 of the consultation paper where DECC says those customers in receipt of certificates for renewable heat will gain benefits such as an exemption from the carbon tax; we support this proposed approach.

Q18: Which option do you think should be applied for renewable energy that is indirectly supplied (e.g. via the natural gas grid)?

BGE require further information before coming to a final view on this question.

We ask that further information is provided by the Department and that this question is covered in further consultations once the necessary information is provided. BGE asks the Department to provide further information to confirm if option A is viable e.g., where a gas customer (e.g., large gas customer) pays a premium to secure a volume of renewable gas, can it be verified that the consumer receives this full volume directly? If so, consideration should be given to a hybrid model where both options A and B are considered i.e., renewable gas that is injected to the grid for general purposes and cannot be attributed to a single customer should be spread event across all customers and any renewable gas that can be tracked back to a single customer, and has been paid for by that customer, should be allocated solely to that customer.

Q19: Do you think the costs set out above are reflective of likely costs?

The cost information provided in the paper does not have any accompanying references to indicate the source of the information nor does it have a breakdown of the calculation methodology, so it is difficult to comment on the validity of the costs. In addition, the costs in the paper are blended costs of compliance for the various sectors so it would be inappropriate for BGE to comment on compliance costs for other sectors. From estimated costs in Ireland as well as experience in other

⁹ Source: GNI- calculated based on 1 GWh receiving certification from May- October 2020

jurisdictions we are aware that the cost of blending biomethane into the gas grid varies from €65-100/MWh depending on feedstock type¹⁰.

Given the potential for significant costs for Irish consumers, we feel that a full and thorough review of potential costs is needed. We suggest that DECC appoints expert consultants to assess the potential costs for implementation in the various sectors i.e., oil, gas, peat etc. and that the outcomes of this study are made publicly available alongside any further consultation papers.

Q20: Are these costs reasonable to impose on consumers?

It is unclear whether the costs are reasonable to impose on consumers. As mentioned in response to question 19, a full and thorough review of costs is needed before a decision can be made on whether the cost impacts of the scheme are reasonable for consumers and whether the scheme can be implemented.

Q21: Do you agree with the intended position in relation to penalties for non-compliance?

While we recognise that penalties are needed to discourage non-compliance, we are concerned that a lack of adequate green gas supply in the early years of the RHO will result in penalties which will be punitive for gas customers. In the context of rising wholesale energy prices, we are extremely concerned that if penalties are imposed it may cause unnecessary price increases. As penalties will be set relative to the costs of compliance a full review of compliance costs is needed (as referenced in response to question 19).

Also, we ask the Department to consider how the RHO will operate with potential future climate change obligations, including the proposal to include heat in the EU Emissions Trading System (ETS). We ask the Department to consider whether any renewable heat volumes will be exempt from EU ETS requirements.

Q22: Do you think the proposed obligation poses a significant risk to increased energy poverty?

While it is reasonable to expect that the RHO will result in increased energy prices which will have a knock-on impact on energy poverty, without robust compliance cost information it is not possible to determine whether the risk level would be considered 'significant'. Once a full review of compliance costs has been completed, DECC can use these costs to complete and impact assessment on energy poverty.

Q23: How best could the impacts on energy poverty be minimised?

An integrated approach will be needed to address energy poverty risks which we anticipate will be addressed through the upcoming the Strategy to Combat Energy Poverty expected later this year. In the first instance, we suggest a review and possible increase of the Fuel Allowance to counteract the cost increases expected from the RHO.

Q24: Do you agree with the outlined approach for additional support for green hydrogen?

BGE has no objection to the proposal to provide increased credits for green hydrogen given it is a nascent sector in Ireland.

¹⁰ Source: RGFI and European Commission

Q25: Do you think that offering multiple credits for green hydrogen in the heat sector might have unintended consequences for supply in other sectors such as transport?

We believe the transport sector is best placed to comment on any potential knock-on impacts.