# Response by Energia to the Department of the Environment, Climate and Communications

***Consultation on the Introduction of a Renewable Heat Obligation***

**29 October 2021**

# 1 Introduction

Energia welcomes the opportunity to respond to the consultation of the introduction of a Renewable Heat Obligation (RHO). We support Ireland's ambition to reach net-zero emissions by 2050. The first section of our response consists of an overarching response to the consultation. The following sections are dedicated to the individual sections of the consultation and include both high level thoughts in respect of each section alongside responses to the specific consultation questions.

# 2 Overarching Response

Energia acknowledge the policy context for this consultation alongside the fact that Ireland did not meet its 2020 target of 16% for renewable energy in the heat sector. Ireland's overall 2030 targets are ambitious, and 2030 is not that far away in terms of designing policy mechanism that would be effective in time. That being said, production of both renewable hydrogen and biogas is at a fairly nascent stage in Ireland to date. By contrast electrified heat is a far more established technology in Ireland, with specific targets outlined for the installation of heat pumps in the Climate Action Plan.

Renewable gas and hydrogen are not expected to represent the entire solution for decarbonising heat in Ireland, therefore it would seem premature to design a scheme that essentially has the effect of "locking in" these two technologies at this stage in their development. Especially if the effect of this scheme is to divert hydrogen and biogas production away from other sectors, namely transport, that are seeking to decarbonise rapidly.

Energia believe it would therefore be appropriate to incorporate electrified heating as a qualifying fuel into this scheme. Suppliers must be given an opportunity to achieve their obligation by encouraging customers away from solid fuel and gas consumption and towards electrified heat. This could potentially be achieved for renewable heat, similar to the way in which suppliers can earn credits for contributing to energy savings under the Energy Efficiency Obligation Scheme. Suppliers would then have options in terms of how best to incentivise their customers to switch to electrified heating, such as via grants, discounts on electricity for heat pump owners etc.. Lastly, if obligated parties have the means of fulfilling their obligation via contributing toward electrified heating installations, it would facilitate an early start date of the scheme due to the maturity of electric heating as a measure. We discuss this further in the following paragraph.

The proposed start date of 2023 for an obligation scheme needs to be reconsidered in Energia's opinion. Gas suppliers typically hedge as far ahead as 36 months in advance, depending on their business model, in an effort to shield their customers from fluctuations in spot market prices (with the past month being an example of why this is of benefit to customers). Biogas is a complimentary product to natural gas and will thus fluctuate in line with natural gas prices. Even with a decision paper produced by the end of the year, suppliers would only have a maximum of 12 months to begin the process of forecasting their likely obligation level and purchasing sufficient biogas and hydrogen stocks to meet it.

A 2023 start date would also create risks in relation to the availability of sufficient volumes of renewable fuel to meet supplier obligations. While it is expected that the introduction of this scheme will ramp up production of biogas and hydrogen, developing a production asset can take a significant amount of time and there is no certainty that

sufficient volumes will be available in time for 2023, or 2025 for that matter. At present no industry standard exists to certify biogas or the greenness of hydrogen, such as an independently audited fuel mix disclosure process verified by a regulator. Energia are doubtful that the necessary administrative procedures would be in place for 2023, given the complexity of the scheme being proposed, especially if the proposal to award multiple credits for certain renewable fuels is pursued.

Energia would also be conscious of the fact that in the absence of sufficient quantities of biogas and hydrogen, obligated parties may have little choice but to "buy-out" their obligation by paying the penalty. As we discuss further in our response to question 21, the penalty level will effectively act as a price ceiling for producers of biogas and hydrogen. If this ceiling is set too high there is a danger that obligated parties in an effort to fulfil their obligation, will purchase renewable fuels at too high a price, thus dampening the competitive pressure necessary to reduce long term production costs. As the cost of the obligation scheme will be passed through to final customers, it is they who will bear the cost of the penalty rate being too high and not the suppliers.

Energia propose therefore that in order to limit the exposure of final customers to the cost of the obligation scheme, a penalty rate slightly above the expected production costs of both hydrogen and biogas should be used. Once there is a sufficient pipeline of production resources in place consideration might be given to increasing the rate of the penalty. However, considering the timelines for project delivery incorporating, planning, grid connection (where required), environmental licenses we do not anticipate this will be soon.

## *2.1 Wider impacts of a potential obligation scheme*

There are a number of steps outlined in the Interim Climate Action Plan which need to be completed for Ireland to decarbonise the gas grid, including developing a policy/regulatory roadmap for the use of green hydrogen. Joined up thinking on how to decarbonise heat, hydrogen and biofuel is therefore needed. The European Commission is expected to publish a delegated act on the framework for the categorisation of hydrogen before the end of 2021. This will have an impact on national regulation and policies for hydrogen. A government assessment that informs the future role of hydrogen and renewable gas in the energy sector, would be welcome as a precursor to pursuing this scheme.

An examination of how such an obligation scheme might influence gas quality in the short term, should also be a consideration. Existing gas generating units are expected to play a role in delivering both system services and capacity beyond 2030. Understanding how this obligation scheme might contribute to changes in gas quality on downstream devices such as power stations is therefore important from a system adequacy perspective.

## *2.2 Just transition*

The principle of achieving a "just transition" is a cornerstone of Ireland's climate policy and it needs to be recognised that the creation of this obligation has a risk of being regressive. Fuel Poverty statistics indicate that while the level of consumption can vary between fuel poor households, the energy efficiency of the buildings that fuel poor households tend to reside in is generally low. Low-income households that presently avail of fossil fuel solutions for their heating are also less likely to be able to invest in alternative solutions such as electrified heating or renewable fuels (wood burning

stoves etc.). The design of the supplier obligation as proposed, is likely to necessitate that suppliers impose additional volume based charges on the price of fossil fuels for final customers. Energia would therefore have concerns in relation to the cost incidence of this proposed scheme.

# 3 Response to specific Consultation Questions

## *3.1 Background*

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

2030 is fast approaching and Energia recognise that an alternative policy solution would take time to design before it could be implemented. A poorly conceived renewable heat obligation would however not be an appropriate measure to introduce, especially if it had the effect of materially increasing the price of customer bills.

For these reasons Energia would consider an RHO obligation to be appropriate only in the circumstances that it:

a) Provides obligated parties with an adequate opportunity to forecast and purchase their obligated quantities in line with their chosen hedging strategies.

b) Encourages efficiency in the production of renewable fuels and protects customers from sizeable additional costs.

c) Compliments existing policy and regulatory instruments promoting decarbonisation.

d) Does not lock in specific technologies (pick winners) that may not represent the optimal solution for the heat industry.

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

Rather than strictly an alternative, Energia believe it is important that greater support is provided for domestic customers to switch to renewable fuel sources.

## *3.2 Market Coverage*

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

Yes, it is important that all fossil fuel suppliers play a role in meeting these targets, every actor in this sector has a role to play.

### *3.2.2 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?*

Energia does not believe electricity used for heating should be included within this obligation, however we do believe that measures to encourage customers to switch to

electric heating should be capable of offsetting a commensurate portion of a supplier's obligation.

### *3.2.3 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?*

Energia has no specific comments in relation to this proposal.

## *3.3 Obligated Parties and Obligation Threshold*

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

As stated in our response to question 1 (section 3.1.2), we believe additional policy measures need to be introduced in order to encourage greater uptake of electrified heating solutions by domestic consumers. If the decision is made to proceed with this obligation, suppliers seem the most appropriate obligated parties. If, however an alternative measure is pursued, it might be more appropriate to target consumers more directly.

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

Energia would support the introduction of a free allowance for all parties similar in design to the free allowance introduced for the Energy Efficiency Obligation Scheme. A free allowance is a competition friendly solution to the cliff edge problem that arises when the threshold is applied on an all or nothing basis. The introduction of a free allowance imposes a target on the basis of marginal supplied volumes over the threshold allowance, reducing the burden on parties who's supplied volumes only slightly exceed the threshold.

In order for a free allowance to be introduced in such a way as not to reduce the overall quantity of carbon emissions offset by this scheme, it might be necessary to reduce the obligation threshold. Energia's suggestion would therefore be to introduce a free allowance of 300GWh of energy supplied for all participants and oblige suppliers only when they exceed the 300GWh of annual energy supplied volumes threshold.

## *3.4 Obligation Rate*

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

Energia believe that a later date than 2023 would be more appropriate to commence the scheme. As stated in section 2 of our response, gas suppliers typically hedge as far ahead as 36 months in advance, depending on their business model, in an effort to shield their customers from fluctuations in spot market prices. Biogas is a complimentary product to natural gas and will thus fluctuate in line with natural gas prices. Even with a decision paper produced by the end of the year, suppliers would only have a maximum of 12 months to begin the process of forecasting their likely obligation level and purchasing sufficient biogas and hydrogen stocks to meet it.

A 2023 start date would also create risks in relation to the availability of sufficient volumes of renewable fuel to meet supplier obligations. While it is expected that the

introduction of this scheme will ramp up production of biogas and hydrogen, developing a production asset can take a significant amount of time and there is no certainty that sufficient volumes will be available in time for 2023, or 2025 for that matter. At present no industry standard exists to certify biogas or the greenness of hydrogen, such as an independently audited fuel mix disclosure process verified by a regulator. Energia are doubtful that the necessary administrative procedures would be in place for 2023, given the complexity of the scheme being proposed, especially if the proposal to award multiple credits for certain renewable fuels is pursued.

Energia are also conscious of the fact that in the absence of sufficient quantities of biogas and hydrogen, obligated parties may have little choice but to "buy-out" their obligation by paying the penalty in the short term.

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

As stated previously Energia would support a later date for the introduction of the obligation level, however we believe an obligation level of 0.5% would by appropriate once the scheme goes live.

### *3.4.3 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?***

As this is a new ambition for 2030 the lower level of the scale would be most appropriate at present given the issues for consideration raised in section 2 of this response. However targets could be reviewed at a later date in advance of 2030 taking into consideration the supply availability as the decade progresses.

## *3.5 Meeting the Obligation*

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

Energia believe 2023 may be too soon to implement this scheme as per our response to question 8 (section 3.4.1). Energia does however agree with the principle of allowing the first obligation period to be multiple years in order to facilitate a soft launch to the scheme.

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

Energia broadly agrees with the approach being an annual obligation however as stated section 2 of our response would advocate for a start date later in the 2020's.

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

Yes, we believe that providing a means by which suppliers can trade credits, ensures better value for the scheme for customers overall. As stated in section 2, at present however no industry standard exists to certify biogas or the greenness of hydrogen, such as an independently audited fuel mix disclosure process verified by a regulator. An industry standard therefore needs to be agreed before trading of credits can commence. Energia also believe that obligated parties should not be limited by the extent that can achieve their obligation via trading credits. The goal of the scheme should be to deliver the required capacity of renewable fuel at the lowest cost, facilitating suppliers ability to trade should help achieve this.

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

Yes, we believe that this form of flexibility especially in the earlier years of any scheme allows obligated parties adequate time to make up any missed targets from one year to the next. Greater flexibility would be welcomed and there should be no upper limit applied for carryover, as this can cause issues in the market, e.g., where quotas are met this may have a knock on impact with production reducing the overall demand if a quota is met earlier in any year.

## *3.6 Sustainability*

### *3.6.1 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?*

As stated in Section 2 Energia believe it would be appropriate to incorporate electrified heating as a qualifying fuel into this scheme. Suppliers must be given an opportunity to achieve their obligation by encouraging customers away from solid fuel and gas consumption and towards electrified heat. This could potentially be achieved for renewable heat, similar to the way in which suppliers can earn credits for contributing to energy savings under the Energy Efficiency Obligation Scheme. Suppliers would then have options in terms of how best to incentivise their customers to switch to electrified heating, such as via grants, discounts on electricity for heat pump owners etc. Lastly, if obligated parties have the means of fulfilling their obligation via contributing toward electrified heating installations, it could facilitate an early start date of the scheme due to the maturity of electric heating as a measure.

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

Energia is not aware of whether or not sufficient indigenous supply will be available in order to meet the demand of even a 3% eventual obligation rate. We would welcome further analysis from DECC on this. Until we have the research on the capability of meeting higher obligation rates, there is a need to set the obligation at a lower level.

## *3.7 Traceability*

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

Energia has no specific comments in relation to this proposal.

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

In relation to indirect supply Energia believes that both approaches have merit and should be facilitated under the final scheme. Suppliers may wish to offer specific tariffs or products (much like they currently do for electricity) and therefore a level of flexibility might permit more innovative customer offerings.

## *3.8 Estimated Costs for Consumers*

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

Energia are acutely aware that very little rigorous evidence is available on the exact cost of these fuels in Ireland at present. As we highlighted in section 2, in the absence of sufficient information on production cost (and quantities) it is important that some form of price ceiling is in place to protect customers and promote more efficient production. As such we would favour the penalty rate being set as close to possible as the estimated production cost for biogas and hydrogen.

### *3.8.2 Q20: Are these costs reasonable to impose on consumers?*

As stated previously in section in section 2.2 fossil fuel suppliers are unlikely to have any option but to pass the cost of meeting the obligation on to final customers via consumption-based charges. The obligation scheme as presently designed would cap the cost of a supplier's obligation at the penalty rate proposed to be somewhere in the region of (€160-€240/MWh) and double the expected cost of the renewable fuel. This is not an acceptable burden to place on customers and thus the penalty rate should be significantly reduced in order to cap the cost of the scheme on final customers.

## *3.9 Penalties*

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

Energia believe the principles of fairness and proportionally should be applied when considering penalties. Any penalty mechanism should also take into consideration of the availability of the proportionate supply of sustainable fuel sources.

As we described earlier, the fact that in the absence of sufficient quantities of biogas and hydrogen, obligated parties may have little choice but to "buy-out" their obligation by paying the penalty. The penalty level will effectively act as a price ceiling for producers of biogas and hydrogen. If this ceiling is set too high there is a danger that obligated parties in an effort to fulfil their obligation, will purchase renewable fuels at too high a price, thus dampening the competitive pressure necessary to reduce long

term production costs. As the cost of the obligation scheme will be passed through to final customers, it is they who will bear the cost of the penalty rate being too high and not the suppliers.

Energia propose therefore that in order to limit the exposure of final customers to the cost of the obligation scheme, a penalty rate slightly above the expected production costs of both hydrogen and biogas should be used. Once there is a sufficient pipeline of production resources in place consideration might be given to increasing the rate of the penalty. However, considering the timelines for project delivery incorporating, planning, grid connection (where required), environmental licenses we do not anticipate this will be soon.

## *3.10 Energy Poverty*

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

While it is important that the right incentives are in place to encourage the behavioural changes necessary to deliver both 2030 targets and net zero. It would not be appropriate, nor in the best interests of delivering such targets to design policies that unduly penalise those who may not have the economic means to participate to the same degree.

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

Fuel poverty statistics indicate that while the level of consumption can vary between fuel poor households, the energy efficiency of the buildings that fuel poor households tend to reside in is generally low. In general, there is no alternative but to pass this through on a per kwh basis, which research shows is likely regressive. Energia have no alternative solutions for this scheme however for future schemes general taxation and a move towards income or wealth-based charges via changes to taxation laws would seem the most appropriate method of funding climate action policy more progressively.

## *3.11 Supporting new green fuels*

### *3.11.1 24: Do you agree with the outlined approach for additional support for green hydrogen?*

Hydrogen, although expensive at present, is a technology that will be needed to achieve net zero by 2030 and beyond. Developing hydrogen as a fuel source likewise does not lock in production-based carbon emissions, as green hydrogen can be generated using entirely renewable electricity. Demand for hydrogen needs to be stimulated however, to increase the economies of scale for production.

As stated previously in section 2.1, the European Commission is expected to publish a delegated act on the framework for the categorisation of hydrogen before the end of 2021. This will have an impact on national regulation and policies for hydrogen. Research and development into where hydrogen can be used most efficiently in sectors such as electrification and transport should underpin a clear strategy for where hydrogen is best deployed. The overall goal should be to increase the investment

certainty for hydrogen-based technologies, driving down the overall cost of both producing and consuming hydrogen.

### *3.11.2 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?*

Fair balance is a necessity to consider when incentivising any technology type. As stated above while demand for hydrogen needs to be stimulated to increase the economies of scale for production, it should not be done by overly incentivising one use over another.