

Renewable Energy Ireland

Renewable Heat Obligation,
Business Energy & Gas Policy Team,
Department of the Environment, Climate and Communications,
29-31 Adelaide Road,
Dublin 2.
D02 X285

By email: Renewable Energy Ireland
<https://renewableenergyireland.ie/>
From: Renewable Energy Ireland Chairperson – Dr. Tanya Harrington
To: RenewableHeat@decc.gov.ie

29th October 2021

Renewable Energy Ireland response to the Introduction of a Renewable Heat Obligation (RHO) Consultation

Dear Sir / Madam,

Thank you for the opportunity to contribute to this “Introduction of a Renewable Heat Obligation Scheme” consultation. Renewable Energy Ireland (REI) brings together organisations working in wind, solar, marine, bioenergy, heat pumps, geothermal and district energy alongside those developing new technologies that support the integration of renewables. Together, we have a shared vision of an Ireland that is energy independent, one where our homes, farms and businesses are powered by clean, carbon-free, renewable energy.

Our response to this consultation was compiled following engagement and consultation with REI members. REI strongly advocates for the timely introduction of an ambitious Renewable Heat Obligation (RHO) Scheme in Ireland. In terms of renewable heat, Ireland is starting from a very low base. A Renewable Heat Obligation scheme represents an opportunity in mobilising the renewable heating sector in Ireland.

Meeting current energy and climate change targets, and the increased ambition to 2030 proposed in the EU Commission Fit for 55 package, presents significant challenges. As outlined in the Renewable Energy Ireland ‘**40by30**’ – **A 40% Renewable Heat Vision by 2030**¹ Report, a wide range of renewable heating technologies and fuels will be required to meet ambitious

¹ https://renewableenergyireland.ie/wp-content/uploads/2021/05/Renewable-Energy-Ireland_Renewable-Heat-Plan_-Final.pdf

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renewable heat targets. This market driven obligation scheme presents an opportunity for the development of the renewable heating sector. **'40by30'** covers a broad range of technologies and focuses on existing and proven technologies that can deliver up to 2030. Other technologies may also come on stream over the next decade and play their part, such as hydrogen and electrification of high temperature industrial heat, however these have not been covered in the **'40by30'** report.

In introducing a Renewable Heat Obligation, lesson can be learned from previously implemented obligation schemes. Introduced in 2010, the Biofuels Obligation Scheme (BOS) has successfully incorporated biofuel in our transport fuel mix. The inclusion rate has steadily increased over the last decade to a current level of 12.3%. Similar to the proposed RHO, the BOS is a market driven decarbonisation measures which is reducing emissions at no cost to the Irish Exchequer.

We have answered the specific consultation questions below. We would like to make some general and high level observations on the consultation document and proposals including:

- REI strongly articulates for the introduction of a Renewable Heat Obligation.
- The threshold level of 400 GWh for those who will be subject to the obligation is too high. This level would render the obligation meaningless for the vast majority of the heat market. Please refer to our response to the specific question below.
- REI believes that the 3% target represents a very low ambition and REI favours a more ambitious target of 15% by 2030.
- We would like the Department to clarify how they are going to ensure that the proposed obligation support indigenous renewable fuels rather than imported fuels.
- The use of green hydrogen needs to be considered in the context of a broader hydrogen strategy considering its best use and value in the decarbonisation of harder to decarbonise sectors such as transport.

We look forward to meeting and engaging with the Department to discuss the various aspects of our submission on the proposed RHO Scheme.

Yours sincerely,

Dr Tanya Harrington

Dr. Tanya Harrington
Chair Renewable Energy Ireland

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REI Responses to the specific consultation questions.

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

REI Response: The introduction of a Renewable Heat Obligation is an appropriate measure. This obligation scheme needs to strike a balance between energy security, affordability and sustainability.

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

REI Response: In addition to this Obligation, direct policy measures to encourage and stimulate the renewable heat market are also required. The '40by30' report clearly outline some key actions and policy measures which if implemented would also encourage the development of the renewable heat sector.

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

REI Response: Yes, the obligation should apply to all non-renewable fossil fuels.

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?

REI Response: We agree that all renewable and waste heat should be exempt. In terms of renewable electricity used for heating, consideration needs to be given to non renewable fossil based electricity. On the assumption that the electricity suppliers will be the obligated party, then the exemption should only apply to renewable electricity. Suppliers already report their percentages of renewable electricity in their mix so it would be easy to apply the exemption and Renewable Heat Obligation to the various proportions.

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?

REI Response: Yes, otherwise CHP systems could be installed purely to avoid the RHO, and would result in an increase in emissions.

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

REI Response: Yes.

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

REI Response: The 400 GWh limit is far too high. This threshold level would mean that many suppliers of fossil fuels including heating oil, coal etc. would be exempt from the RHO, as would some of the smaller gas supply companies. This 400GWh limit would likely leave the RHO

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meaningless for most of the heating market, thus reducing its impact in terms of increasing the deployment of renewable heat.

400 GWh is sufficient to supply more than 33,000 dwellings with heat as outlined in the table below. This figure is based on 2016 census data and the heat requirement figure per dwelling included in the consultation document. This number is greater than the number of dwellings in the counties of Laois (28,020), Cavan (25,818) Galway City (29,274) and Waterford (24,114) to name but a few. We estimate only a small portion of Irish heating oil supply company would have the sufficient scale to mandate them as an obligated party at this proposed 400GWh threshold limit.

Proposed Threshold - In numbers			
Item	Unit	Quantity	Notes
Proposed Obligation Threshold	GWh/yr.	400	
Proposed Obligation Threshold	kWh/yr.	400,000,000	
Average annual heat requirement	MWh / Dwelling	12,000	Average Figure included in the consultation document
Dwellings	Number	33,000	

Renewable Energy Ireland suggests that a 40GWh threshold is set to be an obligated party. We call on DECC to determine the average size of an oil supplier to ensure that the threshold does not leave the RHO meaningless for a large portion of the heating market.

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

REI Response: Yes, the obligation needs to start as soon as possible to make the greatest possible impact to our 2030 targets. Preparation of the market and certainty need to be given to encourage investment and project planning. The Department need to confirm the introduction of the obligation by 1st January 2022 and 6 months later publish the broad structure and architecture of the obligation.

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

REI Response: An initial level of obligation of 0.5% lacks ambition and does not reflect the scale of the heat decarbonisation challenge. We suggest the starting rate should be higher.

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?

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REI Response: 15% should be a minimum target for 2030. As referred to in question 2 other policy supports could make up the remaining 25% in achieving a 40% renewable heat target. The consultation document states that “Ireland currently has 6.3% of its heat sector demand met by renewable fuels, which is the lowest percentage of any Member State and well below the European Union average of 22%”. If we want to progress from the lowest position in terms of renewable heat at 6.3% across Europe, then an ambitious RHO target needs to be set.

Multiple levers are needed to tackle the decarbonisation of our heating systems and the RHO has the potential to be a central pillar of our renewable heat policy.

This non exchequer funded market driven obligation scheme needs to be ambitious in what it achieves, and the ambition should be significantly higher than outlined above.

The Renewable Energy Ireland (REI) ‘40By30’ report details that Ireland has the renewable resources to meet more than the entire Irish heating demand. This report outlines that a 40% renewable heat target is achievable by 2030, therefore the proposed 3%, 5% and 10% obligation levels in the RHO lack ambition and should be maximised.

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

REI Response: We would caution against low level ambition and long lead in time which will postpone action in complying with the obligation in the early years. CO₂ emissions targets are cumulative up to 2030. Any delay in the RHO introduction makes it harder for Ireland to achieve the 51% emission reduction targets set out in the Programme for Government. There is a requirement to get supply chains up and running to build capability and give market certainty.

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

REI Response: Yes, with increasing level of obligation year on year.

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

REI Response: Yes – This should be a central pillar of the RHO and its operation.

We would point out that while successful in achieving inclusion level of biofuels in the fuel mix, the Biofuel Obligation Scheme (BOS) has one shortcoming, in that the obligation is almost entirely met with imported biofuels. The RHO should be designed along the lines of the energy efficiency obligation scheme where credits can only be earned by displacement of fossil fuels on the Irish market. Otherwise the RHO may not achieve its intention which is to increase the share of renewable heat in Ireland.

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

REI Response: Yes

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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?

REI Response: According to the Renewable Energy Ireland '40by30' report, there is an abundance of sustainably produced renewable fuel resources to meet a 40% renewable heat target. This is outlined below in the scenario extract from our report.

Total final energy consumption	2030 Scenarios	
	2018 Baseline (TWh/yr)	RES-H_7% (TWh/yr)
Oil	22.43	8.54
Gas	22.40	17.20
Coal	3.03	1.43
Peat	2.30	-
Wastes (non-res)	0.64	0.87
Electricity (direct)	3.11	2.47
Electricity (heat pumps)	0.26	3.09
Surplus heat & deep geothermal	-	2.82
Biomass	2.93	11.66
RES-gas	0.11	1.86
Solar	0.16	0.16
Ambient energy	0.51	7.40
RES-heat	3.72	23.90
RES-e total	1.01	3.89
Fossil fuels & electricity	53.15	29.71
Grand total (incl all RES)	57.88	57.50
RES-Heat (%)	6.4%	42%
RES-Heat + RES-e (%)	8.2%	48%
Imported fuels	64.2%	34%

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

REI Response: We refer you to the Renewable Energy Ireland '40by30' report which gives an extensive description and quantification of the renewable heat sources available to Ireland. The report details where 23.9 TWh is available to meet Ireland's 7% per year reduction of CO2 in the heat sector by 2030 (see table in previous question). Ireland has plentiful resources to sustainably meet more than 100% of its heating demand from renewable sources.

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

REI Response: Yes

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

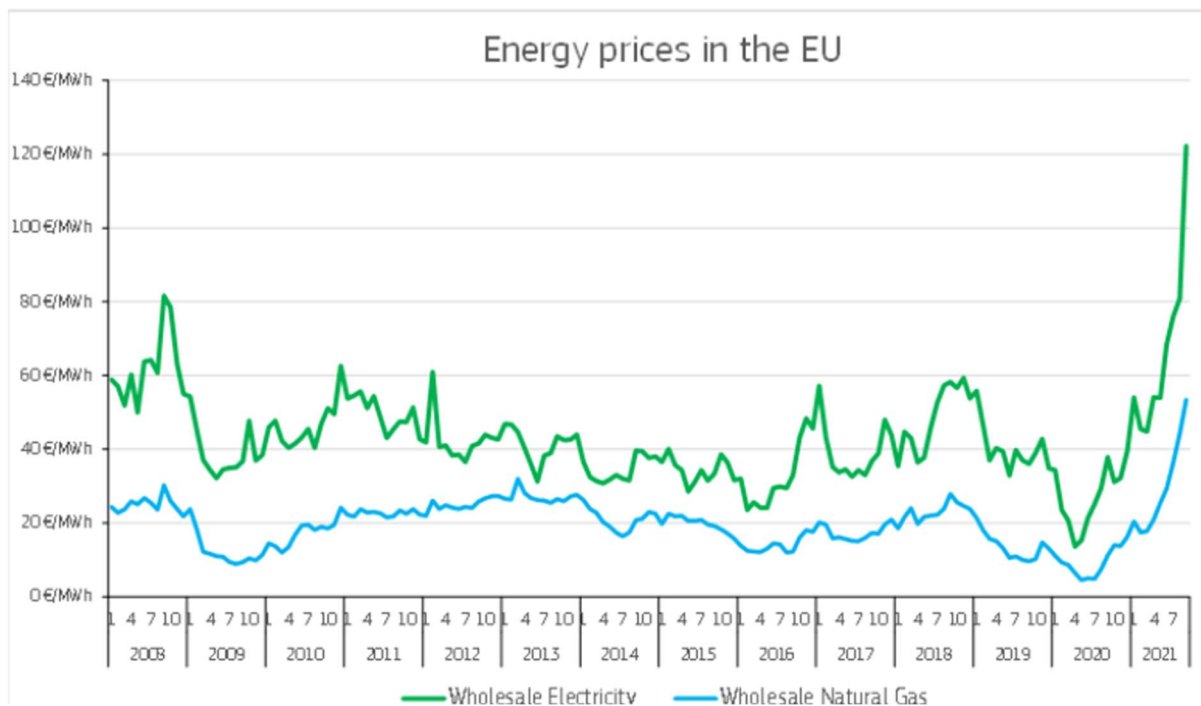
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- Option A: Renewable energy is traced to the end consumer. For renewable gas, this would work similar to other fuels with individual customers being supplied the gas (verified by a certification system). This would allow consumers who value the 'greenness' more to pay slightly more and thus reduce the cost for other consumers. However, it could lead to some gas consumers funding the obligation but being credited with no 'greenness'.
- Option B: Renewable energy is equally proportioned to all of the supplier's consumers. For a supplier of natural gas, the same proportion of renewable gas would be deemed to be supplied to its consumers in the heat sector.

REI Response: We don't see this as relevant to the RHO.

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

REI Response: Given the considerable rise in fossil gas prices in the past 12 months, it is likely that the cost of replacement will be similar to or less than what proposed. The graph below outlines the dramatic increase in electricity and gas prices in 2021.



Q20: Are these costs reasonable to impose on consumers?

REI Response: Yes, the rates are reasonable for fossil fuel users to move to renewable fuels, with incremental increases over the timescale up to 2030. We consider that higher levels could be tolerated given the climate emergency and the need to rapidly decarbonise our economy.

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The '40by30' report very clearly articulates that higher levels of renewable energy supply and the rapid decarbonisation of heat do not necessarily lead to a significant increase in costs to meet our heating requirements. The additional cost of capital investment in renewable heating is more than balanced by the savings in energy expenditure.

A Renewable Heat Obligation would assist in keeping the price of heat stable whereas fossil fuel prices are very volatile and can fluctuate significantly, leading to fuel poverty issues.

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

REI Response: Yes, we believe the penalties are reasonable.

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

REI Response: No, energy poverty measures need to be implemented as per our response to Q23 below.

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

REI Response: The volatility of fossil fuel costs is one of the biggest risks to energy poverty. Energy poverty can continue to be alleviated through social welfare measures. Energy poverty cannot be used as a reason to neglect our climate impact responsibilities and can be alleviated by social welfare supports.

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

REI Response: Yes.

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?

REI Response: Incentives for Hydrogen through RHO should not divert the use of hydrogen from where it is most valuable, both in terms of carbon reductions and economic payback. Separate transport decarbonisation measures may include incentives to utilise green hydrogen as a fuel. Calculations of the costs across both sectors and uses need to be established to ensure that the use of hydrogen for heating is not favoured over transport. Transport is the most difficult sector of society to decarbonise, therefore should have priority for renewable fuel sources such as renewable gases.