

HEATING SOLUTIONS

Renewable Heat Obligation,
Business Energy & Gas Policy Team,
Dept of the Environment, Climate & Communications,
29-31 Adelaide Rd.,
Dublin
DO2 X285

29 October, 2021

Dear Sirs,

Your Refs: Consultation on the Introduction of a Renewable Heat Obligation 2021.

About Firebird & our industry

Firebird Heating Solutions Ltd. is an Irish owned central heating appliance manufacturer based in Baile Mhic Íre, Co. Cork, with distribution depots in Armagh and Devon. We are best known for our range of high efficiency condensing low NOx liquid fuel central heating boilers that we sell in Ireland, NI, GB and to our customers in Europe, Australasia and America.

The liquid fuel domestic central heating appliance manufacturing industry is an Irish success story. More than 50% of oil boilers and tanks sold in the UK are manufactured in Ireland by Firebird and three others in ROI and three manufacturers in N.I. Nearly all oil-fired equipment in sold Ireland is Irish made.

Firebird also produce and supply wood burning stoves, heat pump and cylinder systems and solar thermal systems.

We welcome the consultation as a first step by the State towards decarbonising liquid heating fuels.

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

Yes.

A RHO is an effective government tool to reduce the climate warming fossil-fuel proportion of gas, electric and liquid heating fuels.

We would prefer if the targets and timescale were much more ambitious.

Firebird boilers are now available to customers in Ireland and abroad that operate on 100% fossil free fuel. Hydrotreated Vegetable Oil (HVO) is an advanced fossil free

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bio-fuel. Firebird along with the strong Irish oil boiler and tank manufacturing cluster of excellence is eager to engage with government to agree an action plan and timescale to convert the 680,000 fossil fuel domestic boilers to these advanced fossil free fuels.

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

The government could also consider using other regulations or standards to ensure the rapid increase in the renewable content of liquid heating fuels.

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

Yes

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?

No.

We think the government should be agnostic as to whether the heating energy arrives at the premises as electricity, gas, solids or liquids. The focus of government should be on setting climate warming regulations on a per kilowatt heat or a percentage renewable content basis.. Each industry should then compete by developing the best solutions and technology at the best price for the consumer to meet the government set targets for 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

See our answer to Q4 above. The government should be technology neutral and resist the temptation to favour semi state businesses on the basis of partisan advice.

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?

Yes

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

Yes.

2023 is a good start date. The State needs to engage with stakeholders as soon as possible to help remove predictable teething issues through proper planning.

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

No.

We think it is far too cautious and we would prefer it to be higher. The liquid fuel heating industry is ambitious and confident in its ability to rapidly deliver substantial carbon savings.

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?

Firebird wants the government to work with our industry towards a 100% renewable liquid heating situation for Ireland. The 100% renewable fuel is available as HVO.

The 2030 target should be much higher than 10%.

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

Yes.

There are clear advantages to having the obligation period spread across multiple years, with compliance initially being measured over the full three-year period, and with obligation periods of five and ten years also being considered. To ensure the success of this process, it is vital that policymakers roll up their sleeves and properly engage with all stakeholders from the start and throughout this process.

Even more important will be the introduction of regulatory and taxation changes which incentivise the deployment of alternative fuels such as HVO.

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

Yes.

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

No preference.

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

No preference

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?

Our comments are limited to liquid heating fuel. In this sector, several effective bioliquids exist which could play an enormous role in cutting emissions in the coming years. According to independent research from AECOM, an 86% reduction in emissions could be achieved by using Hydrotreated Vegetable Oil (HVO) in place of kerosene and this product is currently favoured by Firebird.

Biofuels have an enormous role to play here and are already demonstrating their worth internationally. Between 2011 and 2016, utilisation of used cooking oil (UCO) increased by 360% across Europe, and it is increasingly being used for bioenergy across Europe, with countries such as Belgium, Sweden, Austria and the Netherlands showing that household collection can work very well.

While legitimate concerns exist around the sourcing of some biofuels, it is important to remember that 67% of all the biofuel placed on the market in Ireland comes from UCO. For years, our trade body has joined others in the sector in consistently highlighting the need for stronger controls to be put in place at European Union level to ensure that biofuels are sourced sustainably. Biofuels have the capacity to meet home heating needs while bringing about major emissions reductions, but better safeguards are needed when it comes to sourcing such products. There are now reliable and proven certification systems to do schemes to ensure that fuels are

In addition to offering the promise of enormous emissions reductions, the use of HVO would also help to allay concerns about the sourcing of liquid fuels, as Hydrotreated Vegetable Oil is manufactured from 100% renewable and sustainable waste derived raw materials certified via the International Sustainability and Carbon Certification (ISCC) scheme. Most of the fast-growing production capacity is based in Europe.

Policymakers also need to maintain an open mind in relation to the wide range of new low carbon and zero carbon liquid fuels which are coming onto the market, or which are still at an early stage in the evolutionary process. The introduction of a Renewable Heat Obligation will accelerate this process of innovation, with the likely result being that entirely new fuels are developed in order to achieve the goal of carbon neutrality in the coming decades.

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

Yes.

See answer to Q15 above. HVO production capacity is increasing exponentially and the plant operators know that their HVO must be certified as sustainable to the European Energy Directive. There are adequate feedstocks to meet the increasing production.

Certified renewable sustainable renewable European HVO is produced in EU plants and mostly uses EU waste feedstocks.

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

Yes.

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

No preference.

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

This information provided in section 10.8 of the consultation relates solely to gas fired heating. There is no information or question provided in relation to liquid fuels. Irish policymakers only ever look to semi-state and former semi-state energy bodies for “independent” & “expert” guidance; hence the omission of oil heating.

Nevertheless it is clear from both international experience and recent research that alternatives to kerosene home heating oil such as biofuels represent cost effective alternatives. The capital cost of upgrading a kerosene boiler to run on 100% fossil free HVO is a few hundred euros. Changing a home so it operates on a low temperature low output heatpump typically costs tens of thousands of euros. Heatpumps are electrical white goods with a much shorter expected life compared to oil boilers.

Q20: Are these costs reasonable to impose on consumers?

Clearly, increased costs bring with them major challenges for consumers. We need to be mindful of the impact which policy decisions have on those of limited means, and recent warnings about the effect which increased fuel prices have in raising the proportion of people experiencing fuel poverty should be a cause of concern.

680,000 Irish homes are heated using oil-fired systems, and those who rely on this form of heating are eager to make their contribution to cutting carbon emissions. The demonstrably slow progress in meeting the State’s retrofitting targets suggests that a deep retrofitting costing €56,000 on average is not within their reach. Viable alternatives such as bioliquids which mix kerosene with sustainable renewable alternative fuels and products such as HVO, however, would be of enormous benefit in providing these households with the means to make an enormous contribution to cutting emissions from home heating. We firmly believe that an ambitious Renewable Heat Obligation would be an important step in doing this.

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

Yes.

The Government should ensure that a process of ongoing dialogue and proactive engagement is pursued to help identify issues of concern and provide effective

solutions rapidly. We are members of two trade associations that we understand regularly seek meetings with your department.

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

No.

Domestic Heating must transform from being fossil fuel powered to fossil free by 2050 and our country is obliged to meet the Paris 2030 targets. There will be increased costs.

This RHO policy will not in itself add significantly to heating costs.

The government is going to increase the carbon tax on fossil fuels annually. This will increase heating poverty. However the price premium of renewable gas and liquid fuel over their fossil alternatives of natural gas and kerosene will reduce as carbon taxes increase and the renewable fuels industry matures and achieves ever better economies of scale and reduced prices of HVO.

The current one-size-fits-all approach of concentrating solely on the policy of electrification (semi state driven policy) while using taxation as a means of inducing people to choose this option is a recipe for continued failure in terms of fuel poverty in the coming years.

Decarbonising the home heating sector will require much work in the coming decades, and households need real options to allow them to contribute to this vital shared effort. Introducing a Renewable Heat Obligation will accelerate the transition to a future by ensuring that all parts of the sector are prioritising the need to change how we provide effective home heating. There is no panacea available currently, and we need to move towards a policy approach which includes a range of affordable and sustainable energy solutions which will meet people's needs.

The government can choose to encourage decarbonisation by adopting favourable VAT, excise duties and carbon credits rates for renewable liquid heating fuels. This would encourage some fuel distributors and homeowners to choose 100% HVO on environmental grounds, while the RHO would run in parallel for regular heating fuel.

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

See also answer to Q22 above.

To minimise the risk of energy poverty, policymakers need to ensure that a range of viable alternatives are made available to help households achieve carbon reductions without increasing the risk of greater fuel poverty. One core principle in this must be that there should be no penalties where there are no alternatives. The vast majority of rural households rely on oil-fired heating systems, and those living in rural areas often cannot access the natural gas grid, while the possibility of switching to a heat pump is

also often out of the question due to the prohibitive costs which this entails. Thankfully, as a result of the availability of effective new low carbon liquid fuels, there are solutions available, and we need to take every step necessary - both in the area of taxation and regulation - to incentivise a rapid move towards fuels which can deliver a zero carbon future.

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

Yes.

Double or treble carbon credits should be provided for all renewable energies, including hydrogen. There should be a fair level playing field across technologies and industries. In the ears of policymakers our liquid fuel heating industry does not have an equal voice to those industries that were once or are now state owned. This institutional bias hinders policymakers from making the best decisions. HVO in one way, is liquified hydrogen yet it is not included in the proposal for multiple credits. Germany is investing massively in research into both synthetic liquid fuel technologies and green hydrogen.

Green hydrogen represents one of the most exciting and environmentally friendly energy sources available currently. Ireland's geographic position presents unique opportunities when it comes to the production of a product which could make a massive contribution to cutting carbon emissions across a wide range of industries, and recently announced plans for major hydrogen production facilities should be warmly welcomed. The publication of the European Commission's strategy on hydrogen last year was a landmark moment for hydrogen policy,¹ and the Government should follow the policy path laid out elsewhere by rolling out a detailed national strategy for how additional support could be provided for the development of green hydrogen, including the possible use of the aforementioned renewable energy credits. As steps are taken to develop this industry, it will be very important to ensure that the production of green hydrogen is subject to the same strong and transparent controls to ensure that renewable energy is produced to the highest standards in sustainability. While green hydrogen is currently very expensive to produce the massive worldwide funding of research may help overcome this hurdle.

Ireland could import Green liquid fuel today from the EU. We support the application of multiple credits for this green fuel too.

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?

No

We support the proposal at Q24. Ireland and the world wants these new technologies to achieve reasonable levels of scale at economic cost in both the transport and heating sectors. Technology continuously improves and supply rises to meet demand. If world wide green hydrogen production grows to a become a largeworldwide

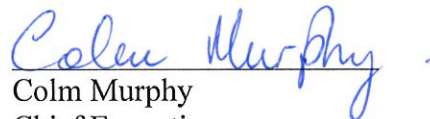
industry then the policymakers in 10 or 15 years' time can intervene with policies favouring heating or transport as appropriate.

10.12 General Input

With the right supports in the areas of taxation and regulation, we can deliver real change for the betterment of all stakeholders. One crucial first step in this process is ensuring that all heating providers begin to incorporate renewable energy within their businesses, and we strongly believe that the introduction of a Renewable Heat Obligation would be the best way of achieving this.

Engagement with the liquid fuel heating sector is of paramount importance as we begin this transition.

Yours sincerely,


Colm Murphy
Chief Executive