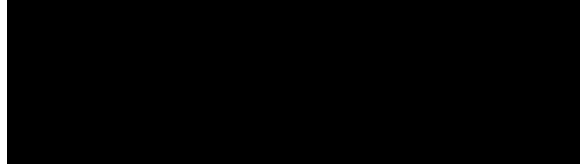


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26 November 2019

## Reply to Consultation<sup>1</sup> on the Biofuels Obligation Scheme for 2021 to 2030

Dear Minister Bruton,

Thank you affording us this opportunity to present our views which we set out below.

### **Preliminary remarks**

1. Ireland's Biofuels Obligation Scheme is a valuable policy instrument. It should be deployed to the maximum extent possible. The DCCAE proposal for the coming years limits does the opposite, designing it as a low impact compliancy measure for the EU Renewable Energy Directive (RED II).

With goals for climate progress in transport that are one tenth the scale of the Paris Agreement goals, RED II is redundant and is now irrelevant in comparison to the scope and scale of the National Energy and Climate Plans being drawn up under the Energy Governance Regulation for Paris Agreement alignment.

The UN Science Report SR1.5 indicates that the biofuels energy contribution to transport will need to reach 15% if global warming is to be brought under control. This is four times what RED II or the Biofuels Obligation Scheme envisage.

Ireland's fleet of diesel and petrol vehicles is still growing much quicker than the uptake of electric vehicles, and it will take years for this to peak, and then drop to levels commensurate with our climate action targets. This is why the UN report highlights the importance of biofuels in transport climate action. Electromobility cannot solve the problem in a fleet which is overwhelmingly based on diesel and petrol and which continues growing, as in the case of Ireland.

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<sup>1</sup> <https://www.dccae.gov.ie/en-ie/energy/consultations/Pages/Public-Consultation-on-Biofuels-Obligation-Scheme.aspx>

The Biofuels Obligation Scheme needs to be revamped for greater impact and quality, based on evaluation by political leaders at the highest levels, and not simply maintained as a tool for compliance with RED II.

2. Ireland should transition to E10 petrol in the coming months, as the move presents no technical or commercial barriers. E10 in the Irish fuel system represents the same level of climate progress as 100,000 electric vehicles, without the 1.1 billion euro in public funding that is needed to incentivise consumers to purchase 100,000 electric vehicles. E10 is the EU standard for modern petrol and it is safe and effective in all petrol vehicles, while any car owners that prefer to stick to the old standard for petrol can source it from petrol outlets which stock old standard petrol.
3. Renewable ethanol now powers the equivalent of 100 million vehicles worldwide, with E10 being the standard in France, the Netherlands, Finland, the USA and numerous other countries in Europe. Bioenergy derived from EU farmed crops is the most sustainable, scalable and cost-effective way of reducing the carbon footprint of the road fleet. The most economical<sup>2</sup> means for cutting carbon emissions today at scale is by crop biofuels. Ireland should maximise its use of crop based biofuels in the coming months, by moving to E10 petrol and higher blend rates of crop biodiesel. There are no substantial barriers to doing so, the climate benefits start accruing immediately and the approach will bring Ireland greater flexibility under EU legislation going forward.
4. Waste-based biofuels such as those made from used cooking oil (UCO) and tallow are extremely climate friendly options for displacing fossil fuel, so long as they come from countries where these materials are legally classed as waste and so long as they are genuine (and not made from virgin palm oil falsely labelled as UCO, as is the practice to a worrying extent today). The Irish government should prohibit UCO imports from sources that fail to prove it is not palm oil, and “double counting” status should not be awarded to UCO that is not legally classified as waste in its country of origin. The government should not seek exemption from the new EU anti-fraud cap on UCO unless it is prepared to assure that the UCO used in Ireland comes from genuine and legally classified waste.
5. The European Commission has failed<sup>3</sup> to implement effective sustainability assurance schemes for all new forms of renewable energy, with the result that unsustainable forms such as palm oil biodiesel and untraceable UCO have become major components of the system. Just as Brussels has devolved climate policy to member states by way of the Energy Governance Regulation, it has done likewise with policy for monitoring the quality of renewable energy (by way of the “Voluntary Schemes” of self-declaration). Ireland, like all member states, must now establish its own stringent systems for regulating energy supplies of all forms, if it is to displace fossil energy by sustainably sourced renewable energy. This is a serious matter for senior leadership attention.
6. The target for 3.5% “advanced” biofuels is central to the proposed Biofuels Obligation Scheme yet it is unobtainable and should not be treated as a viable measure for achieving that level of climate progress by 2030. A target of one fifth of this would be more realistic while still being a good incentive for this emerging sector, and without distorting the planning.

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<sup>2</sup> [https://www.farm-europe.eu/wp-content/uploads/2019/06/Ecofys2019\\_Transport-decarbonisation-2030-CEE.pdf](https://www.farm-europe.eu/wp-content/uploads/2019/06/Ecofys2019_Transport-decarbonisation-2030-CEE.pdf)

<sup>3</sup> [https://www.eca.europa.eu/Lists/ECADocuments/SR16\\_18/SR\\_BIOFUELS\\_EN.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR16_18/SR_BIOFUELS_EN.pdf)

7. Biomethane is the most flexible form of bioenergy available, being readily produced and deployed across many sectors of the economy. The Biofuels Scheme should be revised to include ambitious pathways to significant levels of biomethane for transport in the coming decade.
8. References to renewable energy in transport should state real rates and not notional rates. The real rate of renewables in Ireland's transport today is 3.9% and not 7.2%. The notional rate is nearly half made up of fossil diesel, misleadingly classed as renewable, under a distorting technicality of the renewables Directive called "double-counting". The real rate of 3.9% will drop to about 2.2% when new EU anti-fraud rules on UCO are adopted in January 2021.
9. Both Ireland's Climate Action Plan and its National Energy and Climate Plan fail to describe what measures will be deployed, or how, to achieve Ireland's climate goals in transport for 2030. They fail to establish the relative costs of the various options there are for cutting carbon emissions or how these costs will be borne when the options are scaled up to the levels required. It is premature to define the Biofuels Obligation Scheme before the overall strategy is determined and before these costing and budgeting efforts have been carried out.
10. There is widespread concern among Ireland's transport and climate stakeholders at the lack of in-depth analysis, consultation and planning for climate action. Transport stakeholders know that major change is coming soon. They know that continuity and predictability are no longer options. What they seek now is leadership, and quality regulation to help them through the radical transition ahead. We call on government to create a multi-stakeholder task force to analyse the current mix of energy forms in transport today, to establish the costs of the options for transition and to devise a comprehensive plan for progress.

Note: This response includes an annex containing the Opening Statement by Ethanol Europe to the Oireachtas Joint Committee on Climate Action, 27 November 2019, concerning lack of climate action in diesel and petrol fleets.

## Responses to questions

### 4.1 Biofuel Obligation

#### Question 1:

The Climate Action Plan has identified that blending levels of 10% by volume in petrol and 12% by volume in diesel on average must be achieved by 2030 in order to contribute to meeting Ireland's emission reduction target.

The recast Renewable Energy Directive sets out a target of at least 14% renewable energy in transport sector by 2030. These blending levels, together with the expected growth in electric vehicles, will ensure that the 14% target is achieved.

It is intended that the biofuel obligation rate in the Biofuels Obligation Scheme will increase every two years (i.e. in 2022, 2024, 2026, 2028 and 2030). It is intended that the increases will ensure a relatively linear increase in the level of renewable energy used in the transport sector.

Relevant section of the recast Renewable Energy Directive: Article 25(1)

- (a) Do you consider these blending levels to be a suitable balance of feasibility and ambition?

E10 and B12 are feasible today and should be introduced without delay. Ireland's stakeholders should then pursue higher blend options as soon as possible, as France, the USA and other countries are doing. Ireland's slow rate of progress and ambition is inexplicable.

(b) Do you consider the approach to increasing the biofuel obligation rate appropriate?

Absolutely not. The Biofuels Obligation Scheme should be used as an instrument for meeting the Paris Agreement goals and not simply for compliance with RED II which is redundant as a consequence of its low targets and poor qualitative criteria. By aligning the Biofuels Obligation Scheme with RED II instead of Paris Agreement goals, the government is wasting a valuable policy instrument.

## Question 2:

Increasing the biofuel obligation rate is likely to involve the introduction of fuels with higher concentrations of biofuel (such as petrol blended with 10% bioethanol and diesel blended with 12% biodiesel on average).

This may lead to compatibility issues with older vehicles, additional cost to the consumer, the necessity to inform consumers in order to ease its introduction, and potentially a need to develop forecourt infrastructure.

(a) What do you view as the technical and consumer challenges associated with a blending level of 10% by volume in petrol on average?

There are no technical challenges and no cost implications with E10. All petrol vehicles and fuelling infrastructures are suited to E10. Cars run better on E10 than on older fuels. The supply chain is already supplying E10 to other markets in the EU. It is as cheap or cheaper to make E10 as Ireland's current petrol blend, because the use of more ethanol allows for lower levels of other additives and for use of a lower cost underlying blend.

E10 brings cleaner tailpipe emissions due to reduced particulates and NOx emissions.

All Irish stakeholders, including the fuel sector, are in favour of the immediate introduction of E10. There is no reason why Ireland cannot cut its carbon emissions starting today, by introducing E10 immediately, as opposed to waiting 5-10 years as the Consultation document indicates.

E10 is the standard for EU petrol and it is now the primary blend of petrol in regions with a combined fleet of half a billion vehicles (including the USA and many EU countries). Only positive results have been reported. Nonetheless, drivers who wish to stick to the old standard petrol can do so by sourcing it from petrol stations in Ireland that offer it.

The only matter to be addressed is to communicate to stakeholders how effective, safe and economical E10 is as a means for making transport more climate friendly, and we are prepared to contribute to this communications effort.

France is now rolling out E85 across its retail network. France uses 7% crop-biofuels in its programme for climate action, as is appropriate for an agricultural nation. Ireland only uses 0.7%.

(b) What do you view as the technical and consumer challenges associated with a blending level of 12% by volume in diesel on average?

Ireland should pursue B10-B12 derived from EU seed crops and from UCO and tallow that come from regions where UCO is legally classified as waste and properly traceable.

There are no technical or consumer challenges. Stakeholders should look to France as a positive case study.

(c) What types of biofuel would you expect to be used to meet these increased blending levels?

Crop based ethanol and biodiesel made from EU sourced crops are traceable, cost effective and come with many complementary benefits. These should be the mainstay of Ireland and Europe's programmes for climate action in the diesel and petrol fleets to 2030 and beyond.

Ireland's policy making team should analyse the numbers from first principles, comparing targets for GHG cuts with available options, costs and environmental implications. The numbers will point to EU crop-biofuels.

Waste-based biofuels are highly effective. But there are tight limits on availability and Europe is already exceeding these limits, meaning much of Europe's used cooking oil biofuel is coming from sources that are not actually used cooking oil. They should be used therefore, only where traceability is assured while double-counted status should only be applied to used cooking oil and other "waste-based" are sourced from countries where they are legally classed as waste.

(d) Are such fuels available in sufficient quantities to meet the needs of the Irish market?

Yes. Ireland's fuel needs are modest in comparison with overall EU demand and capacity. Europe has about 20% reserve capacity at present, while more capacity can be added under positive policy conditions.

Europe has significant untapped reserves of crop-biofuels capacity, as tillage land area is actually shrinking by a percent or two each year, yields increase by a couple percent each year, while food waste and meat consumption are expected to start dropping. Demand for crop-biofuels, even at several times today's levels, is tiny in comparison to Europe's capacity for sustainably supplying them.

As EU countries consolidate their National Energy and Climate Plans it will become apparent to industry and the farm sector what demand will develop over the coming decade, and this will bring about the investment needed in bringing to service the capacity that is there.

(e) What actions are needed (outside of the Biofuels Obligation Scheme) to support the increase in blending levels (e.g. consumer communication)?

Very little. The DCCAE should convene an advisory board to help it break the current impasse on progress and set in motion the deployment of E10 and B10/12 and of other progressive measures for lowering the carbon footprint of the nation's large and growing diesel and petrol sector.

(e) What is the expected cost to consumers associated with increasing the blending levels?

There is no extra cost. The new blends work out as cheap or cheaper to produce than the old blends, due to the fuel enhancing properties of biofuels.

Crop-biofuels and biofuels from genuine used cooking oil and tallow are the lowest cost means for cutting carbon emissions in the transport sector.

It is essential that Ireland performs a proper analysis of the costs of the various options there are for climate progress in transport, and that it determines the total cost and optimal mix when these options are scaled up to reach Paris Agreement levels of progress.

Some very insightful studies have been conducted, such as this one [https://www.farm-europe.eu/wp-content/uploads/2019/06/Ecofys2019\\_Transport-decarbonisation-2030-CEE.pdf](https://www.farm-europe.eu/wp-content/uploads/2019/06/Ecofys2019_Transport-decarbonisation-2030-CEE.pdf)

### Question 3:

The recast Renewable Energy Directive sets out that obligation schemes may operate on a volume, energy or greenhouse gas emissions basis. In order to better align the Biofuels Obligation Scheme with the recast Renewable Energy Directive (where targets, limits etc. are based on energy) and to ensure the operation of the scheme is not overly complex, it is intended to move from a volume-based obligation to an energy-based obligation.

The amount of fossil-based energy placed on the market in the transport sector by an obligated party (see below) will be multiplied by the biofuel obligation rate to determine the level of biofuel that must also be placed on the market.

When biofuel is placed on the market, a credit for the level of energy is created. Currently this takes the form of a certificate. When the scheme converts to an energy basis, it is proposed that this will take the form of a level of energy. The energy that is credited will be tradable between obligated parties as is currently the case.

Relevant section of the recast Renewable Energy Directive: Article 25(1)

(a) Do you consider the move to an energy-based obligation appropriate?

Yes. All pricing, taxing and policy measures should be applied by energy content and not by volume or weight. It is inevitable that this will happen across all forms of energy.

Under the current approach of taxing by volume, Europe's most climate and environmentally friendly fuel – ethanol – is actually taxed the most.

#### Question 4:

The recast Renewable Energy Directive must be transposed into law by mid-2021. It is planned to develop and implement the necessary legislative changes in advance of the deadline.

It is important to provide certainty to fuel suppliers to allow them prepare for the changes including sourcing supplies of biofuel. It is also intended to continue to operate on a calendar year basis.

It is therefore intended that the Biofuels Obligation Scheme would continue to operate in its current form until the end of 2021 and the changes set out in this consultation would take place from the beginning of 2022.

It should be noted that some minor changes (such as the reduction of carryover to 15% in 2020) will take place in the period prior to 2022.

(a) Do you consider the timing of changes to the Biofuels Obligation Scheme appropriate?

No. The Biofuels Obligation Scheme should be designed to fit Paris Agreement levels of ambition and not as a low volume and low quality technical compliancy measure for RED II.

Currently, both Ireland's Climate Action Plan and its National Energy and Climate Plan fail to describe what measures will be deployed, or how, to achieve Ireland's climate goals in transport. They fail to establish the relative costs of the various options there are for cutting carbon emissions or how these costs will be borne when the options are scaled up to the levels required. It is premature to define the Biofuels Obligation Scheme before the overall strategy is determined.

There is no doubt that when a comprehensive and viable strategy is arrived at, it will include levels of bioenergy in transport that approach the 15% referred to in the UN science report on climate change (Table 4.SM.1, SR1.54).

## 4.2 Advanced Biofuel Obligation (including Biomethane)

#### Question 5:

<sup>4</sup> [https://www.ipcc.ch/site/assets/uploads/2018/11/sr15\\_chapter4\\_supplementary\\_materials.pdf](https://www.ipcc.ch/site/assets/uploads/2018/11/sr15_chapter4_supplementary_materials.pdf)

The recast Renewable Energy Directive sets out a target of at least 0.2% renewable energy in transport sector to come from advanced biofuels<sup>22</sup> in 2022, increasing to 1% in 2025 and 3.5% in 2030.

It is intended to create a secondary obligation for advanced biofuels. This will operate similar to the biofuel obligation. The amount of energy placed on the market in the transport sector by an obligated party (see below) will be multiplied by the advanced biofuel obligation rate to determine the level of advanced biofuel that must also be placed on the market.

The advanced biofuel obligation will be a sub-obligation and therefore advanced biofuels will contribute to meeting both the advanced biofuel obligation and the biofuel obligation.

When advanced biofuel is placed on the market, a credit for the level of energy is created. This will be recorded separately and will contribute to meeting both the biofuel obligation and the advanced biofuel obligation. This energy will also be tradable between obligated parties.

The increases in the advanced biofuel obligation rate will be as set out in the recast Renewable Energy Directive – i.e. 0.2% from 2022, increasing to 1% in 2025 and 3.5% in 2030.

The implementation of an advanced biofuel obligation is considered a key incentive for the introduction of biomethane as a fuel in the transport sector. This could lead to the production of biomethane from relevant feedstocks (such as the biomass fraction of mixed municipal waste and animal manure) and its use in CNG/LNG vehicles. Meeting the advanced biofuel obligation in this way would provide a market support for the introduction and use of biomethane in the transport sector.

Relevant section of the recast Renewable Energy Directive: Article 25(1); Part A of Annex IX

- (a) Do you consider the approach to introducing an advanced biofuel obligation appropriate?

The target for 3.5% “advanced” biofuels is unobtainable and should not be treated as a viable measure for achieving climate progress by 2030. It distorts the planning process and builds in failure from the get-go. There is virtually no capacity and there are no investment plans in place to build the capacity. Any climate plan which depends on 3.5% advanced for its success will fail, and this is known now. This is a major weakness of RED II and of Ireland’s Biofuels Obligation Scheme. A target of one fifth this would be a healthy stretch goal, without distorting the planning.

- (b) What biofuels do you envisage contributing to meeting this obligation?

Biomethane is the most flexible form of bioenergy available, being readily produced and deployed across many sectors of the economy. The Biofuels Scheme should include ambitious pathways and support for significant levels of biomethane for transport.

## 4.3 Obligated Parties



## Question 6:

The recast Renewable Energy Directive sets out that the target for renewable energy use in the transport sector includes road and rail transport. Currently, under the Biofuels Obligation Scheme, the obligation only applies to road transport. In order to align the scheme with the recast Renewable Energy Directive, it is intended to extend the scope of the obligation to include rail transport.

Relevant section of the recast Renewable Energy Directive: Article 27(1)(a)

- (a) Do you consider the approach to include both the road and rail transport as obligated parties appropriate?

No comment

## Question 7:

The recast Renewable Energy Directive provides for Member States to exempt, or distinguish between, different fuel suppliers and different energy carriers when setting the obligation on the fuel suppliers, ensuring that the varying degrees of maturity and the cost of different technologies are taken into account. Member States may also exempt fuel suppliers in the form of electricity or renewable liquid and gaseous transport fuels of non-biological origin (e.g. hydrogen produced from renewable electricity) from the advanced biofuel obligation.

It is intended, in order to incentivise the use of alternative fuels, to apply a reduced or zero obligation to specific fuels. This means there would be no, or a reduced, biofuel obligation and advanced biofuel obligation on specific fuels.

It is intended to categorise fuels as follows:

- No obligation: CNG, LNG, hydrogen, electricity
- Half obligation (i.e. an obligation is generated based on half the energy content of fuels placed on the market): No fuels
- Full obligation: All other fossil-based transport fuels

As technologies mature and costs reduce, fuels may have the level of obligation increased.

Relevant section of the recast Renewable Energy Directive: Article 25(1)

- (a) Do you consider the approach to exempting certain fuels from the obligation to be appropriate?

No. All forms of energy should be subject to the same overriding criteria for displacing fossil fuel and cutting GHGs. RED II broke down because it is based on unintelligent mandates, caps and multipliers, leading to all sorts of contorted unintended consequences. Ireland needs to take the bull by the horns and develop regulation based on qualitative environmental and climate criteria, and on cost and industrial logic.

Since RED was introduced in 2009 the volume of fossil oil used in transport has continued to rise. The tiny rate of genuine and effective biofuels in Ireland's mix has been eclipsed by growth in the transport sector and by poor quality and ineffective "renewables" such as diesel treated as renewable under the "double-counting" mechanism and such as used cooking oil biodiesel from regions where used cooking oil is not waste and where traceability is impossible to assure. All the while these dynamics have held back development of Ireland's own crop-based and waste-based biofuels industries.

Ireland should "own" the matter going forward instead of simply being subject to dozens of historical factors ostensibly outside its control.

## 4.4 Meeting the Obligation

### Question 8:

The Biofuels Obligation Scheme currently operates by issuing certificates in respect of volumes of biofuel which are placed on the market. For each calendar year, an obligated party must hold sufficient biofuel obligation certificates to demonstrate compliance.

As set out above, it is intended to amend the scheme to operate on an energy basis. In place of issuing certificates, a credit will be provided corresponding to the level of renewable energy placed on the market. Each credit of energy will be categorised as one of the following based on the feedstock it was produced from:

- Advanced biofuel (Annex IX Part A)
- Used cooking oil and animal fats (Annex IX Part B)
- Food and feed crops
- All other

As biofuel (or biogas) is placed on the market, the total level of energy credited to each obligated party (or other entity that places such fuels on the market) will increase in the relevant category. Sufficient balances will be required across all four categories to meet the biofuel obligation and in the first category to meet the advanced biofuel obligation.

It should be noted that although some fuels may not generate an obligation (e.g. CNG, LNG etc.), suppliers who are placing biofuels (or biogas) on the market for use by such vehicles will be credited under the Biofuels Obligation Scheme.

To incentivise the use of renewable transport fuels in aviation and maritime, it is intended to credit biofuels supplied for use in the aviation and maritime sector .

To incentivise the use of alternative fuels, it is intended that renewable fuels of non-biological origin (including renewable hydrogen) and recycled carbon fuels will also be eligible for energy credits.

As the supply of electricity for suppliers will not generate an obligation and the measurement of such supplies would create a significant administrative burden, it is not intended to be obligated parties, it is not intended to provide any energy credit for the supply of renewable electricity to road or rail transport.

Relevant section of the recast Renewable Energy Directive: Article 25(1)

(b) Do you consider the approach to issuing energy credits appropriate?

No. See response to previous question.

Question 9:

The recast Renewable Energy Directive sets out that multipliers can be applied to biofuels produced from specific feedstocks. Multipliers can also be applied to renewable electricity supplied to road and rail transport when calculating compliance with the recast Renewable Energy Directive.

The multipliers allow biofuel from specific feedstock to be preferred. They also allow adjustment for the greater efficiency of electric road and rail vehicles compared to fossil fuel equivalents. There may be an increased risk of fraud in the market in assigning multipliers to biofuels from specific feedstock which needs to be considered.

It is considered appropriate that biofuels (and biogas) for transport produced from feedstock listed in Annex IX of the recast Renewable Energy Directive (i.e. advanced biofuels and those produced from used cooking oil and animal fats) shall be considered to be two times their energy content. This is intended to apply when credit is provided in the Biofuels Obligation Scheme and when calculating compliance with the recast Renewable Energy Directive.

It is intended that, with the exception of fuels produced from food and feed crops, biofuels supplied for use in the aviation and maritime sectors shall be considered to be 1.2 times their energy content. Where such fuels are produced from feedstock listed in Annex IX, the 2 times multiplier shall also apply (i.e. a 2.4 times multiplier would apply). This is intended to apply when credit is provided in the Biofuels Obligation Scheme and when calculating compliance with the recast Renewable Energy Directive.

It is intended to apply a multiplier of 4 times and 1.5 times the energy content for renewable electricity supplied to road and rail transport respectively when calculating compliance with the recast Renewable Energy Directive.

Relevant section of the recast Renewable Energy Directive: Article 27(2)

(a) Do you consider the approach to applying multipliers to be appropriate?

The EU has adopted these systems of multipliers without a foundation of proper life cycle and GHG analysis. Until this situation is resolved the system will continue to result in damaging unintended consequences. The question above quite rightly acknowledges the phenomenon of fraud, which is widespread and serves to undermine the progress of all renewables programmes. But neither RED II nor the Biofuels Obligation Scheme address the issue of fraud. This is an omission that should be corrected.

(b) Do you consider the approach to applying multipliers impacts the risk of fraud?

Yes. Ireland and the EU both depend hugely on imported used cooking oil (UCO) for their results in renewable energy as reported under RED and RED II. There is little chance of fraud (palm oil labelled as UCO) being detected and nearly no chance of it being punished. Palm oil costs less than UCO so the profit incentive for fraud is significant. The European Commission proposes to address this sometime in the future with a database

which has not even been designed yet and which they say may not address UCO fraud even when it is built.

Ireland cannot address a problem it has today with a solution that does not yet exist, is out of Ireland's hands and may not even be designed to solve this specific problem.

Ireland should take control of, and responsibility for, its programme for climate action in the diesel and petrol sector, and not delegate it to an uncertain process over which it has no control

## 4.5 Limits on Specific Biofuels

### Question 10:

Under the recast Renewable Energy Directive and the subsequent delegated act<sup>23</sup>, biofuel produced from palm oil is classed as being high risk from an indirect land use change perspective. Further feedstocks may be similarly classed in future.

Until 2023, Member States should not exceed the level of consumption in 2019 of any biofuels considered to be high risk. From 31 December 2023 until 31 December 2030 at the latest, the limit is to be gradually decreased to 0%.

Given Ireland has very limited use of biofuels produced from palm oil and the impacts in relation to indirect land use change, it is intended that a limit of 0% will be implemented for all biofuels considered to be high risk from an indirect land use change perspective. While it will still be permitted to supply these biofuels, no credit will be given in the Biofuels Obligation Scheme and therefore there will be no incentive for suppliers to provide such fuels.

It is proposed that this limit would take effect from 2022 along with the other intended changes to the Biofuels Obligation Scheme.

Relevant section of the recast Renewable Energy Directive: Article 26(2)

- (a) Do you consider the approach to biofuels produced from feedstocks that are considered a high risk (from indirect land use change perspective) appropriate?

It is very good that Ireland excludes palm oil from its feedstock. The Delegated Act does not go far enough as it allows palm oil "small holders" to be exempted from the status of "high risk", rendering the Act ineffectual. France has decided to go one step further and cease use of all palm oil in its fuel system.

Used cooking oil should be considered as "high risk" on the basis that there is large scale fraud in sector, involving palm oil being falsely labelled as used cooking oil in regions where traceability is difficult to assure.

Ireland should make efforts to prevent palm oil entering the country's energy system under the guise of UCO.

## Question 11:

The recast Renewable Energy Directive includes a limit on biofuels produced from food and feed crops. The maximum limit in energy terms which is likely to apply for Ireland for these biofuels is 2% based on current use of these biofuels.

The majority of biofuel currently supplied to petrol vehicles is produced from food and feed crops. It is intended that the level of biofuel use in petrol vehicles would double from 5% to 10% and therefore it is intended to set the limit at 2% to provide for this growth.

As the limit set will be five percentage points less than the maximum of 7%, the overall target that applies to Ireland of 14% will reduce to 9%. This reduction only applies when measuring compliance with the recast Renewable Energy Directive. As set out above, the obligation will be set to ensure the overall 14% target is achieved.

When a biofuel produced from food and feed crops is placed on the market, a credit for the level of energy is created. This will be recorded separately to other biofuels or advanced biofuels. While this energy will contribute to meeting the biofuel obligation, it will be limited to 2% of the energy placed on the market (i.e. the energy used to calculate the obligation).

The energy credit for biofuel produced from food and feed crops will be tradable between obligated parties. However, the classification will remain and it will be counted within the 2% limit for the purchaser of the credit.

Relevant section of the recast Renewable Energy Directive: Article 26(1)

- (a) Do you consider the approach to biofuels produced from food and feed crops appropriate?

No.

Ireland should apply qualitative criteria in determining which renewables to promote and which not, and this applies to all forms of renewables, including electricity (would you allow renewable electricity derived from the damming and diversion of a river that previously supported farms and ecosystems?).

An arbitrary cap of 2% is just plain silly. This is the lowest cap that is possible under the now redundant RED legislation. Ireland could have gone for 3% or 4% or higher. France, Sweden, Austria, Belgium, Luxemburg and many other countries already have crop biofuels contributing 5% or more to transport energy, and Ireland, as an agricultural nation, should aim for that level too (up from its current 0.7%).

If the Biofuels Obligation Scheme was based on a common sense analysis of the options available for climate action in the fleet Ireland has today - and will have in 2030 and 2040 - and of the relative costs, ancillary impacts and feasibilities of these options, Ireland would be striving for a level of 5-10% crop-based biofuels.

The Biofuels Obligation Scheme should be decoupled from RED II and repurposed for Ireland's own climate programme under the Paris Agreement.

## Question 12:

The recast Renewable Energy Directive includes a 1.7% limit on biofuels produced used cooking oil (UCO) and animal fats<sup>24</sup> that can be counted for compliance with the target of at least 14% renewable energy in transport sector by 2030. A multiplier of 2 can apply to such biofuels (see below) which would lead to a maximum contribution of 3.4% towards the target of 14%.

It should be noted that the recast Renewable Energy Directive does not appear to place any restriction on the contribution such biofuels can make to the overall level of renewable energy in Ireland or emission reduction from the transport sector.

As set out above, Ireland can comply with the transport sector target in the recast Renewable Energy Directive by achieving a level of 9% by 2030. Advanced biofuels are expected to contribute 1.75% on an energy basis (equivalent to 3.5% with a multiplier of 2 applied), biofuels from food and feed crops could contribute up to 2%, and UCO and animal fats could contribute up to 1.7% (equivalent to 3.4% with a multiplier of 2 applied). That would lead to 8.9% of the 9% target before electric vehicles and electric rail are counted.

Given the restriction only applies to the transport sector target, how such a limit will be included in the Biofuels Obligation Scheme will need to be considered carefully.

In addition, Member States (where justified) can modify the 1.7% limit taking into account the availability of feedstock. Any such modification shall be subject to the approval of the European Commission.

In 2018, of the 216 million litres of biofuels placed on the Irish market, 162 million litres were biodiesel produced from UCO or animal fats. This represented over 3% in energy terms of the energy used in the transport sector in 2018 and thus is in excess of the 1.7% limit.

Given the level of biofuel used from these feedstocks in Ireland, consideration is being given to seeking the European Commission's approval for a higher limit. Such a request to the European Commission would need to be evidence-based and focus on the availability of feedstock.

Relevant section of the recast Renewable Energy Directive: Article 27(1)(b)

- (a) What approach do you think should be adopted in relation to the 1.7% limit on biofuels produced from UCO and animal fats?

Cap or no cap, fake UCO sourced from palm oil will squeeze out genuine domestic UCO unless there are proper criteria and enforcement mechanisms in place. Currently these criteria and mechanisms are absent.

As things stand it is likely that a third or more of the UCO biodiesel used in Ireland, and Europe as a whole, is actually sourced from virgin palm oil, and to make things worse, this is double-counted even though it comes from countries where UCO isn't classed as waste.

Capping to 1.7% will reduce the overall volume of UCO used in the fuel supply, but increase the proportion of undesirable palm oil within the cap, because in a system where cost is the only criteria then palm oil will win.

Yes, the European Commission and the UCO industry propose measures to improve traceability in the future. These measures are, however, to be implemented at some uncertain time in the future, under a process outside the control of Irish policy makers and to requirements and a design not yet specified. So yes, they are welcome, but no they do not present a solution to today's problem.

Ireland could promote further development of its indigenous UCO collection and processing sector by restricting imports from regions where UCO is not legally classed as waste and not properly traceable.

(b) Do you consider it appropriate to seek the European Commission's approval for a higher limit and, if so, what evidence would you suggest be used to support such a request?

Capping to 1.7% will reduce the overall volume of UCO used in the fuel supply, but increase the proportion of fraud within the cap. It's not a question of capping or not capping, it's a question of integrity. Ireland should apply qualitative criteria.

## 4.6 Carryover of Credits

### Question 13:

The Biofuels Obligation Scheme allows for up to 25% of the obligation in any one year to be met using certificates carried over from either of the previous two years. This limit is in the process of being reduced to 15% from 2020.

It is intended to retain this carryover system in order to provide suppliers with a level of flexibility, and support the creation of new supplies of biofuels. However, changes will be necessary due to the intention to move from a volume-based obligation to an energy-based obligation. The introduction of a target for advanced biofuels and limits on biofuels produced from food and feed crops will need to be catered for.

It is intended that where an obligated party has, after trades with other parties, an excess credit of energy over and above the level required to meet its obligation, it can be transferred to the following year provided that:

- the excess credit of energy does not include any energy in excess of the 2% limit on biofuels produced from food or feed based crops (i.e. if an obligated party exceeds the 2% limit, this credit of energy cannot be carried to the following year);
- the excess credit carried into the following year can only be used to meet the biofuels obligation and not the advanced biofuels obligation; and
- the excess credit carried from a given year cannot exceed 15% of the obligation for that year.

The treatment of carryover of energy from biofuels produced from used cooking oil and animal fats will need to be examined in the context of the 1.7% limit (see above).

At the end of 2021 it is intended that obligated parties will be permitted to carryover certificates as follows:

- a maximum of 15% of the certificates that a supplier was required to have in 2021 may be carried into 2022; and
- each certificate will be credited with 30 MJ energy<sup>25</sup>.

(a) Do you consider the approach to carryover appropriate?

No comment

## 4.7 Compliance

### Question 14:

There has been a very high level of compliance with the Biofuels Obligation Scheme. This is ensured through the requirement to pay a compliance fee (referred to as a ‘buy-out charge’ in legislation) when an obligated party does not meet its obligation. Currently, the fee paid by obligated parties who fail to meet the obligation is €0.45 for each certificate (equivalent to a litre of biofuel) below the required level. This is equivalent to €0.015 per MJ of energy (assuming an average of 30 MJ per litre/certificate as above). There have been very limited examples of this fee being paid to date due to the high level of compliance.

The level of the fee has been set to ensure it is more cost effective for an obligated party to increase the level of biofuels as opposed to paying the compliance fee. Given the future increases in the obligation rate, the marginal cost of supplying more biofuel to the market is expected to increase. It is therefore intended to increase the fee to €0.02 per MJ in 2022, €0.03 per MJ in 2025 and €0.04 in 2030.

The cost of supplying advanced biofuels is expected to be greater than that of other biofuels. Accordingly, it is intended to see the fee for non-compliance with the advanced biofuel obligation to be twice that for the biofuel obligation (i.e. two times the monetary levels set out above for each MJ of energy).

(a) Do you consider the approach to setting the level of compliance fee (or ‘buy out charge’) to be appropriate?

Yes



## Question 15:

In the event of a significant oil/biofuel supply disruption, the requirements under the Biofuels Obligation Scheme continue to apply. If such a disruption lasted for a prolonged period, it is possible that obligated parties may not be able to meet the requirements of the scheme.

There is currently no scope for any adjustment to the Biofuels Obligation Scheme to take account of such a situation. Fuel suppliers would therefore be liable for compliance costs in not meeting the obligation.

Therefore, there is some merit in providing the Minister scope to adjust the obligation under the scheme in the exceptional circumstances. However, any such adjustment, while providing flexibility to obligated parties, should not impact the overall obligations of the scheme.

It is therefore considered appropriate that the Minister may, in the event of a significant disruption that prevents the supply of biofuels to the market, provide obligated parties flexibility in compliance. This would be achieved by allowing obligated parties the option to make up for any shortfall in a specified calendar year in the following calendar year in place of paying compliance costs.

- (a) Do you consider the approach to dealing with a potential supply disruption appropriate?

Yes

## 4.8 Heat Sector

### Question 16:

The Biofuels Obligation Scheme is currently limited to the transport sector. In the heating sector, there is a high use of fossil fuels, including oil and natural gas, which could potentially be blended with renewable fuels to reduce emissions in the heat sector.

Responses to the previous consultation of the Biofuels Obligation Scheme highlighted a number of technical challenges to using bioliquids in the heat sector (e.g. a large amount of oil used in the heat sector is stored in tanks outside homes and businesses over long periods of time which may cause issues).

Notwithstanding the input received to date, the introduction of such fuels in the heat sector can bring significant decarbonisation benefits and therefore continues to be kept under consideration.

- (a) What is your opinion on the potential for an obligation scheme (similar to the Biofuels Obligation Scheme) in the heat sector?

There is good potential so long any such heat sector scheme is based on quality and not on the current approach which applies the “unintelligent” and ineffective lists, caps and multipliers of RED and RED II.

(b) What do you see as the technical barriers to introducing such a scheme?

There is need for a bigger regulatory team with the skills to design and apply effective regulation. Ireland needs to beef up its capability in the light of the challenges of reaching 2030 climate goals under the Paris Agreement.

(c) If a heat obligation scheme was to be introduced, what level of obligation (e.g. in percentage or energy terms) would be appropriate?

So long as effective criteria and enforcement mechanisms are in place (GHG savings, life cycles analysis, traceability) then specific level of obligation can be flexible. A rigid obligation in the absence of intelligent application will bring undesirable consequences.

## 4.9 Additional Input

Question 17:

In addition to the specific questions asked in this consultation, your input is invited in relation to the development of the Biofuels Obligation Scheme for the period 2021 to 2030 including the implementation of the elements relating to renewable transport fuels in the recast Renewable Energy Directive.

See preliminary remarks.

The bottom line is that DCCAE proposal for the Biofuels Obligation Scheme to 2030 is based on alignment with an EU Directive which is not fit for purpose, in terms of scale and in terms of quality.

Ireland should redesign the Scheme for greater scale, greater quality and as an instrument for reaching our goals under the Paris Agreement..

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Sincerely,

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## Opening Statement by [REDACTED] on behalf of Ethanol Europe and IrBEA, 27 November 2019.

Allow me thank the Chair, Deputy Naughton, and the Members for inviting Ethanol Europe to address the Committee. Ethanol Europe is an Irish organisation which produces climate friendly ethanol for cutting greenhouse gas emissions. IrBEA is the Irish Bioenergy Association.

We believe Ireland should be doing much more in the transport sector to address climate change, both where electromobility is concerned, and where our huge and growing diesel and petrol fleet is concerned.

It is now part of routine conversation among academic and industry leaders to express surprise and concern at the meagre consideration given the matter. In the midst of a climate emergency of immense proportions they expected to be convened to urgent consultations for achieving early progress. Instead there's mostly a vacuum. Today's hearing is very welcome clearly.

Despite the size and growth rate of Ireland's diesel and petrol fleet Ireland has done less than virtually any other country in Europe to cut its carbon emissions in it; little encouragement is given to the oil sector to do more; a blind eye is turned to palm oil being falsely labelled as used cooking oil in our biodiesel; and we see needless delaying of the simple and cost-free measure of introducing E10, the European standard for modern petrol today.

As you know, fossil energy is our biggest source of climate-harming greenhouse gas emissions. In Ireland 40% of our energy related emissions come from diesel and petrol vehicles, and this is increasing both in relative terms and in absolute terms.

Ireland has a fleet of over 2.7 million diesel and petrol vehicles. Last year there were 280,000 new registrations – half brand new and half imported used - and the total grew by 45,000, net of de-registrations. Just one in 70 new registrations was electric or hybrid, and the diesel and petrol fleet actually grew by an amount ten times greater than total sales of electrics.

It will be several years before the diesel and petrol fleet reaches peak size, it will be a couple of decades more before electrics match diesel and petrol, and by that time the total fleet will be close to double the size it is today. As a nation we are guilty on two fronts: We need to do more to build the electric fleet that we would want in an ideal scenario; and we need to take serious action to reduce the carbon footprint of the fleet we have, and that the Irish people continue to invest in. The latest UN report on climate change - recognizing the scale and longevity of fossil fuel in transport - says that biofuels will need to reach 15% of transport energy if global warming is to be brought under control. Ireland has less than a quarter of this today and aims for the same or less by 2030, according to its recent proposal for the future of the Biofuels Obligation Scheme, which is the country's regulatory instrument for implementing transport bioenergy policy.

In the context of the Paris Agreement the EU has passed legislation which demands 40% cuts in GHG emissions by 2030, and 32% renewable energy, across the economy. Ireland has signed up to this and will have to match those figures. How can it be reasonable then, that our country's new

proposal for the Biofuels Obligation Scheme - instead of aspiring to alignment with the Paris Agreement ambitions – essentially goes in the opposite direction? What is proposed currently, is alignment of the Scheme with a now redundant piece of EU regulation called the Renewable Energy Directive for transport, which – if it were to achieve its maximum imaginable ambition would bring 10% renewables in transport by 2030, but which allows, by way of loopholes and options, unambitious countries to settle for as little as 3 or 4%. Ireland is aiming for the lowest end of the scale under the Biofuels Obligation Scheme – both in volume terms and in terms of quality – with us treating climate action in the diesel and petrol fleet as just an irksome piece of Brussels bureaucracy.

It is frequently noted that Ireland has achieved 7.2% renewable energy in transport to date, under the reporting schema of the Renewables Directive. What doesn't clearly emerge is that nearly half of this figure is actually regular fossil diesel counted as renewable according to the "multiplier" loophole of the Directive, and that much of the other half is comprised of used cooking oil biodiesel which comes from regions where fraud is carried out on a huge scale, with virgin palm oil being falsely labelled as used cooking oil. Only a third of the 7.2% figure is reliable and true, coming from genuine European used cooking oil and tallow, and from sustainable traceable climate friendly ethanol produced by the European farm sector.

Climate progress in the diesel and petrol fleet is a challenge, but it is possible, and there are some measures which can be taken immediately. Ireland could have introduced E10 fuel by now. E10 means 10% ethanol in petrol. France, Belgium, the Netherlands, Germany, Finland, the USA and many other countries have done it already, because E10 cuts GHG emissions, cuts particulates emissions from exhaust pipes, is considerably better for cars than petrol with no ethanol in it, and comes from the sugar and starch of sustainably grown European crops, with no risk of adverse environmental impacts.

To get an idea of how valuable this measure is, just consider that E10 in Ireland will bring the same climate benefits as 100,000 electric cars, it can be done overnight, and it comes at no cost to the consumer or exchequer. In contrast, encouraging 100,000 Irish drivers to buy electric will cost the State 1.1 billion euros in grants and foregone tax revenue. This would be money well spent in my opinion, but why not take the free option too, and adopt E10? Yet instead of jumping at the opportunity of cutting carbon emissions immediately, we currently plan to delay the measure until as far out as 2030.

So what could we do as a country to become more proactive and resourceful?

1. Redesign from scratch the Biofuels Obligation Scheme, which is an extremely valuable regulatory instrument, and use it as a means for progressing our ambitions under the Paris Agreement.
2. Introduce E10 petrol right away. All it requires is some coordination and communication.
3. Set a target for bioenergy in transport commensurate with the UN science report figure of 15% and seek ways of reaching it while maintaining proper qualitative criteria for determining which forms of renewables to allow and which not. The Renewables Directive allowed for low volume and low quality, with loopholes you can drive a bus through. The Paris Agreement is different.

Brussels isn't prescribing the regulations under it, so Ireland needs to own the problem from now on, and to do it right.

4. Sustainable crop-based biofuels such as European ethanol will be central, as they are the most scalable and economical forms of bioenergy available for transport. There are substantial "untapped reserves" of them in Europe, they are economical and easy to produce without risk of adverse impacts, and they are compatible with today's fleets of diesel and petrol vehicles. France, Sweden, Austria, Belgium, Luxemburg and many other countries already have crop biofuels contributing 5% or more to transport energy, and Ireland, as an agricultural nation, should aim for that level too (up from its current 0.7%).
5. Biomethane will also play a significant role, as biomethane is an extremely flexible form of bioenergy, both in how it is produced and how it is used. With well-designed policy support biomethane could scale to as much as 3% of Ireland's transport energy needs in little more than a decade.
6. Examine the current mix of biofuels in Ireland's diesel and petrol fleet, and weed out the bad from the good. Traceable genuine European used cooking oil and tallow biofuels should continue to enjoy special status based on their extremely high greenhouse gas savings and contribution to reducing landfill waste, while restrictions should be imposed on imports from countries where the raw materials are not legally classed as waste, and where the governance systems are ineffective in preventing palm oil leaking into the supply chain. Ireland should not be worrying about whether it can achieve an exemption from Brussels from the new anti-fraud cap, instead Ireland should be working to assure that only genuine used cooking oil, that is legally a waste in its country of origin, is allowed under our climate programme.
7. It will be necessary to set up a results-oriented programme development team for transport climate action, with deep technical and regulatory skills. This should be initiated at the earliest possible moment. It should establish from the outset what the costs are for each of the options for cutting carbon emissions in transport, and what the total costs will be when applied at the scale required for meeting our Paris Agreement goals. Ireland is in the process of finalising its National Energy and Climate Plan, as required under Europe's strategy for meeting its Paris Agreement goals, and the lack of clarity and the of lack of costings in this Plan currently, should be a cause for concern.

Thank you for hearing these arguments today. We hope they are of service and we express our interest in contributing to any future government work on climate action in transport.

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