



**Roinn Cumarsáide, Gníomhaithe  
ar son na hAeráide & Comhshaoil**  
Department of Communications,  
Climate Action & Environment

# Biofuels Obligation Scheme

Consultation on future increases in the biofuels obligation rate

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## 1 Executive Summary

The Department of Communications, Climate Action and Environment is seeking views in relation to implementing a phased increase in the biofuel obligation rate.

Input is sought on a number of questions including the level of increase, methods of meeting an increased obligation, technical challenges, competitiveness impacts, the potential for limiting the level of carryover of certificates from one year to the next, and the potential to introduce a similar obligation in the heating sector.

The public consultation will be open for 7 weeks and will close on 19<sup>th</sup> January 2018.

## 2 Background & Policy

### 2.1 Biofuels Obligation Scheme

The Biofuels Obligation Scheme was introduced in 2010 and is administered by the National Oil Reserves Agency<sup>1</sup>. The scheme requires each road transport fuel supplier to ensure a certain proportion of all fuel supplied is from renewable sources.

It is a certificate based scheme where certificates are issued in respect of biofuel which has been demonstrated to have complied with strict sustainability criteria and placed on the market. Two certificates are awarded for each litre of biofuel produced from certain sources (e.g. wastes, residues, non-food cellulosic material, and ligno-cellulosic material) placed on the market with one certificate awarded per litre of other biofuels.

For each calendar year, a fuel supplier must hold sufficient biofuel obligation certificates to demonstrate compliance. The number of certificates required is determined by the biofuels obligation rate.

The **biofuel obligation rate** is the number of biofuel certificates that must be held by each supplier in a given year as a percentage of the total transport fuel placed on the market in litres. Currently the rate, as set under the legislation, is 8.695% which means that for every 100,000 litres of fossil fuel placed on the market, 8,695 certificates must be held.

This rate is commonly referred to as 8% as 8 certificates are required for every 92 litres of fossil fuel placed on the market.

The obligation rates referred throughout this consultation correspond to the latter definition.

Therefore where a rate of 10% is referred to, it corresponds to 11.111% (i.e. 10/90) in legislation and where a rate of 12% is referred to, it corresponds to 13.636% (i.e. 12/88) in legislation.

The biofuel obligation rate is based on volume and does not correspond directly to Ireland's 2020 targets which are expressed in energy terms. This is because the energy in a litre of biofuel differs from that in fossil fuel.

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<sup>1</sup> <http://www.nora.ie/biofuels-obligation-scheme.141.html>

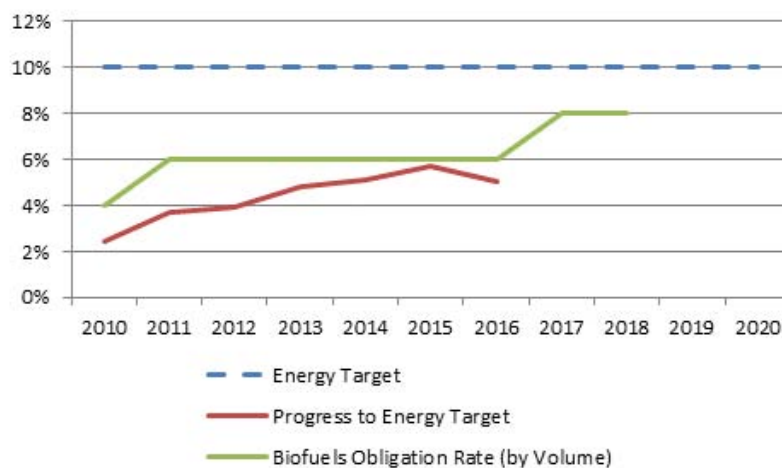
## 2.2 Policy Overview

The 2009 Renewable Energy Directive set Ireland a target of 16% of all energy consumption to be from renewable sources by 2020 with targets of 40% for the electricity sector, 12% for the heat sector and 10% for the transport sector.

Ireland aims to meet the 10% renewable energy target in the transport sector through the increased use of sustainable biofuels, with electric vehicles also making a contribution. The deployment of biofuels through the Biofuels Obligation Scheme will be the primary mechanism to ensure that Ireland's renewable energy target of 10% for transport is met. The latest figures produced by SEAI show that Ireland reached 5.0% towards this 10% 2020 target in 2016.

Ireland's progress towards the renewable energy target in the transport sector is shown graphically below along with the biofuels obligation rate.

**Figure 1 – Progress towards renewable energy target in the transport sector**



Source: Energy in Ireland (SEAI)

As previously outlined in the 2015 Public Consultation, in order for Ireland to meet the 10% renewable energy target in the transport sector, an increase in the biofuels obligation rate to circa 12% is required.

### 2.3 Sustainability of Biofuels

The Biofuels Obligation Scheme serves a major role in decarbonising the road transport sector in Ireland. Sustainability criteria established in the European Union (Renewable Energy) Regulations, 2014 (No. 483 of 2014) ensures that sustainability requirements for biofuels placed on the market are reached. These measures include that feedstocks for biofuels are only sourced from land with low carbon stock and there is no impact on biodiversity.

In addition, biofuels must meet a minimum greenhouse gas emissions saving in carbon intensity in comparison to fossil fuels<sup>2</sup>. The average litre of biofuel placed on the market in Ireland in 2016 had a carbon intensity of circa 18.5 gCO<sub>2</sub>e / MJ, which represents a 78% reduction in carbon intensity in comparison to road transport fossil fuel.

Biofuels used in the EU must comply with these sustainability criteria if they are to be counted towards compulsory national renewable energy targets. Suppliers can demonstrate that their biofuels comply with the criteria by relying on verification documentation provided by one of the nineteen voluntary schemes that have been approved by the European Commission. With the exception of a very small quantity of biodiesel produced from used cooking oil, all of the biofuel placed on the Irish market in 2016 was covered by a voluntary scheme.

### 2.4 Indirect Land Use Change and Biofuels

With the growth of the biofuels industry in Europe, concerns about Indirect Land Use Change developed as a risk was identified that biofuel use in the EU could result in lands that were previously used to produce crops for food being converted to produce crops for biofuels. As the demand for food would still remain, other land previously non-cropland such as grasslands and forests could be fostered for food production and as a consequence increased greenhouse gas emissions would be produced particularly for grasslands and forests as they typically absorb high levels of CO<sub>2</sub>. While Indirect Land Use Change takes place outside the biofuel production and supply chain, it can be linked to biofuel production due to the international nature of agricultural commodity markets which means that the conversion of land can take place anywhere in the world and if more biofuels are produced to fulfil renewable energy targets, demand for these crops will rise as well. This effect can be even more indirect, since an increase in demand for one crop can cause this crop to expand at the expense of another crop, which in turn can drive the conversion of forest or grassland elsewhere.

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<sup>2</sup> If biofuel is from an installation which came into production after 6th October 2015, the greenhouse gas emissions saving must be at least 60%. Biofuels produced in installations built on or before 6th October 2015 must show a minimum of 35% greenhouse gas emissions saving until end of 2017 and a 50% saving from 1st January 2018

This makes Indirect Land Use Change a cross-border effect, acting internationally and also across crops. Additional emissions can be released due to the loss of carbon stock from the land<sup>3</sup>.

European Union Directive 2015/1513 known as the “Indirect Land Use Change Directive” was adopted in an effort to address these risks and to encourage the use of advanced biofuels over crop based biofuels. The following are the main provisions of the Indirect Land Use Change Directive:

- limits the share of biofuels from crops grown on agricultural land that can be counted towards the 2020 renewable energy targets to 7%
- Member states are required to set non-binding targets for advanced biofuels harmonises the list of feedstocks for biofuels across the EU whose contribution would count double towards the 2020 target of 10% for renewable energy in transport
- requires that biofuels produced in new installations deliver life cycle greenhouse gas savings of more than 60% against a fossil fuel comparator
- introduces stronger incentives for the use of renewable electricity in transport

The provisions of the Indirect Land Use Change Directive are in the process of being transposed into national legislation.

## 2.5 Advanced Biofuels Target to 2020

In April 2017, Ireland officially notified the European Commission that we would endeavour to achieve 0.25% of energy in the transport sector from advanced biofuels.

Under Article 3(4) (e) of the Renewable Energy Directive (2009/28/EC as amended by the ILUC Directive 2015/1513), an indicative target for advanced biofuels to be reached by Member States by 2020 had to be set out by each Member State before the 6th of April 2017, with an indicative target of 0.5% established.

While, biofuel production has been recognised as a significant measure in which to reduce greenhouse gas emissions, reach mandatory renewable energy targets and combat climate change, it has also been acknowledged by the European Commission as representing a material risk of land-use change.

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<sup>3</sup> An extensive study was commissioned by the EU Commission and published in August 2015 whose aims were to quantify land use change emissions resulting from the existing EU biofuel policy up to 2020 and assesses also the land use change impacts of this policy in 2030. It outlined both direct and indirect impacts of land use change. It is available here: [https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report\\_GLOBIOM\\_publication.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report_GLOBIOM_publication.pdf)

With the dislocation from agricultural lands for biofuels production, pressure can potentially be placed on other unique areas such as forestry to accommodate production. By establishing a minimum level of consumption of biofuels produced from feedstocks and of other fuels<sup>4</sup> as per a percentage of overall renewable energy content deployed in transport, it is envisaged that the use of advanced biofuels will be supported over crop based fuels.

Member States were permitted to set a national target lower than the reference value of 0.5%, based on one or more of the following grounds:

- (i) objective factors such as the limited potential for the sustainable production of biofuels produced from feedstocks and of other fuels, listed in part A of Annex IX, or the limited availability of such biofuels at cost-efficient prices on the market;*
- (ii) the specific technical or climatic characteristics of the national market for transport fuels, such as the composition and condition of the road vehicle fleet; or*
- (iii) National policies allocating commensurate financial resources to incentivising energy efficiency and the use of electricity from renewable energy sources in transport.*

With regard to Ireland's current biofuels policy, it is clear that while extensive progress has been made in the last number of years, significant challenges remain to achieving the full potential of Ireland's biofuel's capacity. Most of the biofuel which has been produced in Ireland has been biodiesel from Used Cooking Oil and Tallow. There have also been small amounts of biodiesel produced from rape seed and a small amount of bioethanol production in the past.

The Mineral Oil Tax Relief Scheme which aimed to incentivise the domestic production of biofuel came to an end in 2010. While the Biofuels Obligation Scheme has so far increased the use of biofuels in Ireland, it has not increased the production of indigenous biofuels as biofuels are imported at more competitive prices which domestic producers have not been able to compete with resulting in major fuel companies bypassing smaller indigenous producers.

Ireland, having considered the reference target set by the Commission of 0.5%, has decided to establish a national target of 0.25% under the condition outlined below:

- (i) objective factors such as the limited potential for the sustainable production of biofuels produced from feedstocks and of other fuels, listed in part A of Annex IX, or the limited availability of such biofuels at cost-efficient prices on the market;*

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<sup>4</sup> Listed in part A of Annex IX



## 2.6 Fuel Quality Directive

The Fuel Quality Directive (Directive 98/70/EC) was recently amended<sup>5</sup> to include an obligation on fuel suppliers to reduce the greenhouse gas emissions<sup>6</sup> that fuels cause over their life-cycle<sup>7</sup>. Under Article 7a, suppliers are required to gradually reduce emissions by up to 10% per unit of energy from fuel and energy supplied in transport. The reduction should amount to at least 6% by 31 December 2020 compared to 2010. The Directive also established sustainability criteria that must be met by biofuels if they are to count towards the greenhouse gas intensity reduction obligation and verification of compliance with the sustainability criteria.

Article 7a of the Fuel Quality Directive is now also administered by National Oil Reserves Agency. Meeting the 6% reduction target and the renewable energy target in the transport sector will rely to a large extent on substituting sustainable biofuels for fossil fuels. However, to meet the Fuel Quality Directive target with biofuels alone may require more biofuels than needed for compliance with the renewable energy target in the transport sector. There are also additional mechanisms included in the Fuel Quality Directive for assisting with compliance: upstream emission reductions and electricity suppliers can opt to participate.

It is notable that two separate European directives (the Fuel Quality Directive and the Renewable Energy Directive) set out requirements that impact the level of biofuels in transport fuel. This provides a complicating factor in relation to fuel supplier compliance.

## 2.7 Biofuels in Ireland

The Biofuels Obligation Scheme Annual Report 2016 published in May 2017 reported that that over 174 million litres of sustainable biofuels were placed on the Irish market. This was made up of 109 million litres of biodiesel (blended with diesel) and 65 million litres of bioethanol (blended with gasoline). All of the biodiesel was from feedstocks that were wastes or residues: used cooking oil, spent bleached earth and category 1 tallow and therefore, deemed to have no Indirect Land Use Change emissions and not count towards the 7% cap set out in the Indirect Land Use Change Directive.

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<sup>5</sup> S.I 581 of 2016. Available here <http://www.irishstatutebook.ie/eli/2016/si/581/made/en/print>

<sup>6</sup> "Life cycle greenhouse gas emissions" means all net emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O that can be assigned to the fuel (including any blended components) or energy supplied. This includes all relevant stages from extraction or cultivation, including land-use changes, transport and distribution, processing and combustion, irrespective of where those emissions occur;

<sup>7</sup> i.e. When they are refined, transported and used.

All of the bioethanol was from crop based material (e.g. corn, sugar cane, sugar beet, wheat). It is estimated that bioethanol accounted for less than 1% in energy terms of all road transport fuels (biofuels and fossil fuels) placed on the market.

Increasing the biofuel obligation rate is likely to involve the introduction of fuels with higher concentrations of biofuel (such as E10 which is petrol blended with 10% ethanol and B7 which is diesel blended with 7% biodiesel).

There are technical challenges relating to the use of such fuels. For instance, E10 is not suitable for fuelling some cars currently in use in Ireland. This could mean that an introduction of E10 would require users of these cars to have access to lower biofuel blends. This may lead to a need for changes in forecourt infrastructure (e.g. to provide one pump for E10 and another for a lower biofuel blend). An information campaign to increase awareness amongst Irish drivers about compatibility may also be required. Such awareness campaigns have been carried out in countries such as Belgium, Finland and the UK.

## 2.8 Alternative Fuels Infrastructure

The Alternative Fuels Infrastructure Directive (AFID 2014/94/EU) was developed by the European Commission to support the development of appropriate refuelling infrastructure and associated standards in the transition away from the use of oil. The directive outlines a number of possible alternative fuel options to oil in transport such as electricity, hydrogen, biofuels, liquefied petroleum gas (LPG) and natural gas in the form of compressed natural gas (CNG) and liquefied natural gas (LNG).

In May 2017, Ireland adopted and published a National Policy on Alternative Fuels Infrastructure for Transport<sup>8</sup>. This Framework aims to establish targets to achieve an appropriate level of alternative fuels infrastructure for transport and support the uptake of alternative fuels.

While it is emphasised that the Framework will have no role in setting or amending policy on the use of biofuels due to existence of instruments such as the Renewable Energy Directive, Fuel Quality Directive and Biofuels Obligation Scheme, the framework was produced in line with existing and in development national climate and energy policies such as the Energy White Paper.

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<sup>8</sup> Policy is available here: <http://www.dttas.ie/sites/default/files/publications/public-transport/english/alternative-fuels-framework/6186nfpalternative-fuels300517.pdf>

Similarly, the framework also explicitly acknowledges that biofuels are considered to constitute an important alternative to fossil fuels and are likely to account for the majority of alternative fuels on the market in the short-to-medium term, particularly over the next decade while also emphasising the importance that biofuels are derived from a sustainable source and do not undermine land use.

## 2.9 National Mitigation Plan

The recently published National Mitigation Plan<sup>9</sup> sets out a holistic approach to Ireland's transition to a low carbon, climate resilient and environmentally sustainable economy by 2050. It is the first plan of its kind and as such does not attempt to provide a complete roadmap to achieve the 2050 objective but will instead set out a process of medium and long term options to ensure that we are well positioned to combat climate change and greenhouse gas emissions. It points to how the latest greenhouse gas emission projections from the EPA show that transport emissions are set to increase by 10-16% beyond current levels over the period to 2020, depending on the level of policy intervention.

Due to its holistic nature, the National Mitigation Plan was developed in line with Ireland's obligations under the current 2009 Effort Sharing Decision, the Paris Agreement and any likely future EU and international obligations that may arise, including potential new national targets for 2030.

Decarbonising Transport forms an important aspect of the National Mitigation Plan. While recognising the diversity of measure already introduced in this area and in the context of the ambitious target for 2050, the National Mitigation Plan also puts forward a range of potential additional actions that are being considered for the future in order to increase efforts to mitigate emissions from the sector.

It acknowledges that the expansion of the Biofuel Obligation Scheme will be essential in decreasing the concentration of high-emitting fuels needed to support a more efficient transport system and recognises the contribution made by the scheme in delivering greenhouse gas emissions abatement levels of circa 0.4 million tonnes of carbon in 2015 alone. It flags the incremental increases to be made from 2018 to the Biofuel Obligation rate and how these increases will take cognisance of technical and other developments.

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<sup>9</sup> The National Mitigation Plan is available here:  
<http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf>

## 2.10 Brexit

The UK plays an important role in the supply of mineral oil and biofuels to Ireland. There is also a key dependency on British refineries which only manufacture petrol suitable for blending with 5% ethanol and similar to Ireland, nearly all biodiesel currently supplied in the United Kingdom is derived from used cooking oil and category 1 tallow. The potential impact of Brexit in this regard is being examined as part of the overall Departmental and cross-Government work.

## 2.11 Renewable Fuels – UK

In the UK, the Renewable Transport Fuel Obligation commenced on 15 April 2008 and is intended to deliver reductions in GHG emissions from the road transport sector by encouraging the supply of renewable fuels. It requires that suppliers of road transport fuels to blend a certain proportion of biofuel into the petrol and diesel they supply.

There was a Renewable Transport Fuel Obligation public consultation which closed in late January 2017 looking to introduce a range of measures including increasing the Renewable Transport Fuel Obligation level by increments to 9.75% (by volume) in 2020 to achieve 5-6% of renewable energy use in transport by 2020, and to maintain at least that level of supply to 2030 to support longer term decarbonisation goals and provide certainty to industry. In September 2017, the UK government confirmed that the obligation level would be increased to 9.75% in 2020, rising to 12.4% in 2032.

The consultation looked principally to:

- increasing the supply of waste derived fuels;
- encouraging the production of advanced, or 'development', fuels, and renewable fuels of non-biological origin such as renewable hydrogen;
- setting a maximum level for the supply of fuels made from food crops.

## 2.12 Carryover of certificates

Under the Biofuels Obligation Scheme, certificates for biofuels which are placed on the market in one year can be carried over and counted towards a maximum of 25% of an obligated party's biofuel obligation in either of the next two years. However, in measuring compliance with Ireland's renewable energy targets, only the energy from such biofuel placed on the market counts towards the targets for that year.

Therefore, a risk exists that 25% of the certificates used to comply with biofuel obligations in 2020 could be from previous years. Although suppliers' biofuel obligations could be met it could result in Ireland missing its renewable transport target.

## 2.13 EU Policy context to 2030

In November 2016, the European Commission published the 'Clean Energy for All Europeans' package which included a proposal for a new (recast) Renewable Energy Directive to apply from 2021 onwards.

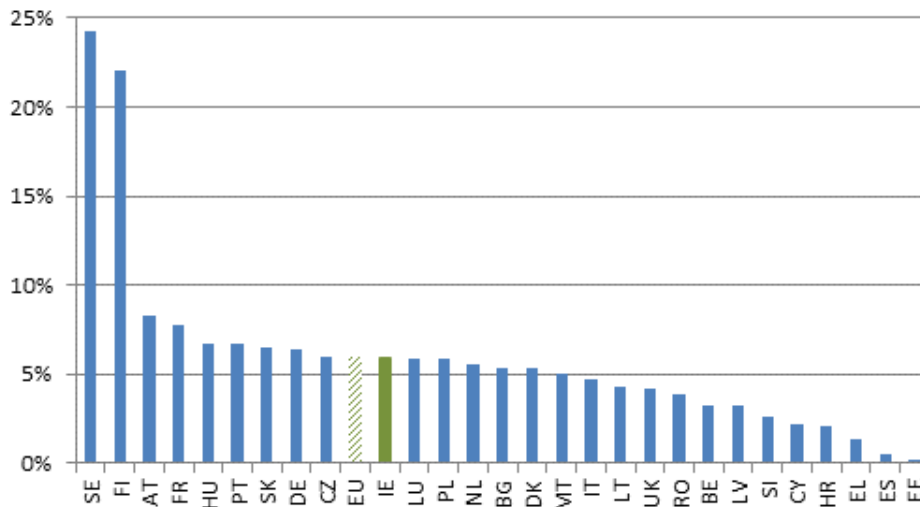
Although the details of the proposal remain under negotiation, it is clear that biofuels will continue to have a key role in renewable energy in transport post-2020.

## 2.14 Progress in other countries

Across the EU, renewable energy in the transport sector comes largely from biofuels. Other renewable energy sources (including biogas) do not play a prominent role in the transport sector at EU level, but are deployed in some Member States (e.g. in Sweden and Finland).

As shown graphically below, in 2015 Ireland was ranked mid-way in countries in terms renewable energy in transport.

**Figure 2 – EU Member State progress towards minimum 10% renewable energy target in the transport sector (2015)<sup>10</sup>**



## 2.15 Heat Sector

The Biofuels Obligation Scheme places an obligation on fuel suppliers in the transport sector to ensure a proportion of the volume of fuel supplied is from renewable sources. In 2015, the transport sector constituted over 70% of the oil (including oil products such as petrol, diesel etc.) used in final energy consumption in Ireland. This totalled over 4.6 million tonnes<sup>11</sup>.

Although not as significant as the transport sector, the heat sector consumed over 1.8 million tonnes of oil in 2015<sup>12</sup>. This is over 40% of the energy use in the heat sector. It was distributed across the domestic (52%), industry (25%), commercial/public services (13%), and agriculture and fisheries (9%) sub-sectors.

Ireland is currently over halfway to achieving its target of 12% renewable energy in the heat sector by 2020. In order to make further progress towards this target, more measures will be necessary.

One such policy measure would be to introduce an obligation scheme (similar to the Biofuels Obligation Scheme) in the heat sector.

<sup>10</sup> Source: [https://ec.europa.eu/commission/sites/beta-political/files/report-renewable-energy\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/report-renewable-energy_en.pdf)

<sup>11</sup> Source: SEAI Energy in Ireland – millions of tonnes of oil equivalent

<sup>12</sup> Source: SEAI Energy in Ireland – millions of tonnes of oil equivalent

Such a scheme could involve requiring fuel suppliers in the heat sector to ensure a set proportion of energy supplied is from renewable sources (such as bioliquids<sup>13</sup>).

Such a scheme could allow Ireland to increase the use of renewable energy in the heat sector without significant replacement of infrastructure (such as oil boilers in homes etc.). However, there are a number of technical challenges that must be overcome.

For instance, the fuels used in the heat sector differ from those in the transport sector and may not be as readily blended with bioliquids. Some infrastructure currently in use in the heat sector may not be suitable for use with fuels that include bioliquids. In addition, 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 for bioliquids.

Some of the challenges can be overcome and others could be avoided by fuel suppliers concentrating supplies that included bioliquids to specific sub-sectors (such as industry).

To date, this policy option has not been explored in depth. However, given that over 40% of energy consumed in the heat sector is oil, the introduction of a renewable energy obligation scheme is considered to have potential.

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<sup>13</sup> Biofuels used outside of the transport sector are referred to as bioliquids

### 3 Proposal

In order to ensure that Ireland meets its 10% target for renewable energy in the transport sector by 2020, it is estimated that a biofuel obligation rate of circa 12% is required. The exact percentage is dependent on a number of factors including the type of biofuel and the extent to which those biofuels are eligible for two certificates (per litre).

Any increase will need to be implemented on a phased basis to assist the industry to adapt to any technical adjustments necessary and to establish suitable sources of sustainable biofuels.

It is therefore proposed to increase the biofuels obligation rate are follows:

- an increase to 10%<sup>14</sup> from 1st January 2019; and
- an increase to circa 12%<sup>15</sup> from 1st January 2020.

It is also proposed to restrict / reduce the current level of use of carried over certificates in 2020 in order to maximise the contribution of the Biofuels Obligation Scheme to Ireland's renewable energy target in the transport sector.

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<sup>14</sup> Corresponding to 11.111% in legislation

<sup>15</sup> Corresponding to 13.636% in legislation



## 4 Consultation Questions

### Question 1:

In order to meet Ireland's 2020 renewable energy target in the transport sector, it is proposed to increase the biofuel obligation rate to 10% from 2019 and circa 12% from 2020.

- Do you support this policy measure?
- What biofuels do you envisage contributing to meeting these increased rates?
- What alternative approaches do you view as being more likely to achieving Ireland's 2020 renewable energy target in the transport sector?

### Question 2:

In order to meet Ireland's 2020 renewable energy target in the transport sector, it is proposed to increase the biofuel obligation rate to 10% from 2019 and circa 12% from 2020.

- What impact do you believe this will have on fuel prices?
- What alternative approaches could provide a more cost-effective method of achieving Ireland's 2020 renewable energy target in the transport sector?

### Question 3:

In order to maximise the contribution of the *Biofuels Obligation Scheme* to Ireland's renewable energy target in the transport sector, it is proposed to restrict / reduce the current level of use of carried over certificates in 2020.

- Do you support this approach?
- What would be the appropriate level of carryover for use in 2020 and beyond?
- If you feel the current level should be maintained, please provide reasoning including an alternative approach to maximising the contribution from biofuels to achieve Ireland's renewable energy target in the transport sector.

### Question 4:

The recently amended *Fuel Quality Directive* (Directive 98/70/EC) places obligations on suppliers to reduce emissions – specifically the reduction in carbon intensity of at least 6% to be met by 31 December 2020 compared to 2010.

- How do you envisage this requirement being met?
- Are there any measures that Government could take to assist obligated parties reach the Fuel Quality Directive target?

#### Question 5:

Increasing the biofuel obligation rate is likely to involve the introduction of fuels with higher concentrations of biofuel (such as E10 which is petrol blended with 10% ethanol and B7 which is diesel blended with 7% biodiesel). This may lead to compatibility issues with older vehicles, consumer cost, the necessity of consumer awareness in order to ease its introduction, and potentially the development in forecourt infrastructure.

-What do you view as the technical and consumer challenges associated with increasing the biofuel obligation rate (including introducing fuels such as E10 and B7)?

-Can fuels such as E10 and B7 be brought to the market in Ireland by 2020?

-Are there technical barriers to achieving 7% conventional biodiesel blend (B7) averaged across the full year, including the winter months?

-For biodiesel blend rates higher than 7%, are drop-in biofuels a viable solution for Ireland?

#### Question 6:

Since the publication of *A European Strategy for Low Emission Mobility* in July 2016, the European Commission has designated that food based biofuels have a limited role in decarbonising the transport sector due to concerns about their actual contribution to the decarbonisation. It is envisaged that a gradual reduction of food based biofuels and their replacement by more advanced biofuels will realise the potential of decarbonising the transport sector and minimise the overall indirect land-use change impacts. The EU Commission has signalled that the trajectory of biofuels is away from first generation biofuels towards advanced or second generation biofuels. This is primarily to be achieved through the introduction of a cap on first generation biofuels and the incentivisation of advanced biofuels.

-How should the development of increased levels of advanced biofuels be supported in Ireland?

#### Question 7:

Currently, the *Biofuels Obligation Scheme* is limited to the transport sector. In the heating sector, there is a high use of fossil fuels (including oil) and a target 12% of energy consumption from renewable sources by 2020.

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

-What do you see as the technical barriers to introducing such a scheme?

**Submissions may be made by writing to:**

Biofuels Consultation

Heat & Transport Energy Policy

Department of Communications, Climate Action and Environment

29-31 Adelaide Road,

Dublin 2 D02 X285

By email to [biofuel.obligation@dccae.gov.ie](mailto:biofuel.obligation@dccae.gov.ie)

The deadline for receipt of submissions is: 19<sup>th</sup> January 2018

Responses to this consultation are subject to the provisions of the Freedom of Information Act 2014 and Access to Information on the Environment Regulations 2007-2014. Confidential or commercially sensitive information should be clearly identified in your submission, however parties should also note that any or all responses to the consultation are subject in their entirety to the provisions of the FOI Acts and may be published on the website of the Department of Communications, Climate Action and Environment.

## 5 Annex

### *Relevant legislation and Support Documents*

Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010

<http://www.irishstatutebook.ie/2010/en/act/pub/0011/index.html>

S.I. No. 33/2012 - European Union (Biofuel Sustainability Criteria) Regulations 2012

<http://www.irishstatutebook.ie/2012/en/si/0033.html>

S.I. No. 483/2014 - European Union (Renewable Energy) Regulations 2014

<http://www.irishstatutebook.ie/eli/2014/si/483/made/en/print>

S.I. No. 225/2016 - National Oil Reserves Agency Act 2007 (Biofuel Obligation Rate) Order 2016.

<http://www.irishstatutebook.ie/eli/2016/si/225/made/en/print>

S.I. No. 581/2016 - European Union (Renewable Energy) (Amendment) Regulations 2016.

<http://www.irishstatutebook.ie/eli/2016/si/581/made/en/print>

Renewable Energy Directive (2009/28/EC):

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028&from=EN>

ILUC Directive (2015/1513) Amended both the Renewable Energy Directive (RED) and the Fuel Quality Directive and is intended to begin the transition from fuels based on food crops towards advanced biofuels. It is set out to be transposed into Irish legislation during 2017.

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L1513&from=en>

Proposal for a recast Renewable Energy Directive (initial draft)

[http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0767R\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0767R(01)&from=EN)