College Biofuels is a division of College Group - a rendering industry leader, producing high-quality oils and meals for the renewable energy and pet food industries. College Group are on continuous quest for newer and better ways of creating and utilising renewable resources in Ireland.

Our newly commissioned biodiesel facility represents another important step towards our goal of increasing sustainability in the Irish transport and fuel sectors. The new facility will allow us to help Ireland achieve and exceed European requirements for renewable energy. We will take waste products including used cooking oil and animal fat and produce clean, green, sustainable fuel. The renewable fuels produced are a part of the strategy for combating climate change.

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 21 Biofuels used outside of the transport sector are referred to as bioliquids Page 12 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?
- (b) Do you consider the approach to increasing the biofuel obligation rate appropriate?

Answer:

College Biofuels considers the approach to increase the biofuel obligation rate to be appropriate

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 Page 13 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?

Answer:

College Biofuels consider the move to energy-based obligation to be appropriate.

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 to 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?

Answer:

College Biofuels supports the proposed timeline for scheme changes to be introduced. We believe this is necessary to give industry time to prepare.

Question 5:

The recast Renewable Energy Directive sets out a target of at least 0.2% renewable energy in transport sector to come from advanced biofuels 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 like 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?
- (b) What biofuels do you envisage contributing to meeting this obligation?

Answer:

(a)

College Biofuels supports the introduction of an Advanced Biofuel Obligation Scheme. From a biodiesel perspective as referenced in Q17, we feel the application system for listing a waste/residue as double counted needs to be altered to allow biofuel producers to look for more alternatives without the current financial commitment required of buying the feedstock, producing biodiesel, placing it on the market and only then being able to apply for waste/residue status which could be rejected, thus making the product unfeasible.

(b)

There are numerous potential advanced biodiesels that can be made from feedstocks falling under the 'Other non-food cellulosic material' category of Annex ix Part A such as acid oils. At present, as mentioned above, these materials would need to be approved by NORA and DCCAE, but numerous feedstocks that fall under this category are recognised as double counted waste/residue feedstocks in other EU member states most notably under the UK RTFO scheme such as rapeseed residue, acid oils and brown grease.

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?

Answer:

College Biofuels supports the DCCAE proposal to include both road and rail transport as obligated parties.

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)

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

Answer:

College Biofuels supports the DCCAE proposals regarding energy credits.

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

Answer:

College Biofuels supports the DCCAE proposals regarding multipliers.

Question 10:

Under the recast Renewable Energy Directive and the subsequent delegated act, 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?

Answer:

College Biofuels supports the DCCAE proposal. College Biofuels have no issue with the proposed approach to biofuels produced from feedstocks that are considered a high risk (from indirect land use change perspective)

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?

Answer:

College Biofuels supports the DCCAE proposal. We have no issue with the proposed 2% limit on food and feed crop biofuels.

Question 12:

The recast Renewable Energy Directive includes a 1.7% limit on biofuels produced used cooking oil (UCO) and animal fats 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?
- (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?

Answer:

(a)

College Biofuels feels there are alternative approaches that could be taken in relation to monitoring the feedstocks falling under the 1.7% cap. The EC is currently looking at an EU database that will trace every supplier and feedstock that is placed on the market, this is expected to be in place by mid-2021. Additionally, more stringent audit measures being put in place by voluntary schemes which are under the remit of the EC, will ensure it is more difficult for fraudulent feedstocks to make it to the market.

(b)

College Biofuels supports the DCCAE proposal to seek approval from the European Commission for flexibilities regarding the 1.7% limit given Ireland's use of/and access to UCO and animal fats.

We feel it is important to outline the availability restrictions of alternative (advanced) in the EU and 1^{st} generation feedstocks in the UK and Ireland to emphasize the gap that will be created in implementing this cap in Ireland.

At present in Ireland there are few alternative feedstocks in place to be used in the biodiesel mix over UCO and Tallow. Work can be done to investigate alternative 'waste and residue' & 'advanced feedstocks' to have them recognised by Nora & DCCAE as double counted advanced feedstocks, but a huge amount of material would be required to fill the void (currently 98.7% of Irish biodiesel feedstocks) introduced by a 1.7% cap on Annex ix Part B feedstocks.

From the virgin oil (1st generation) single count feedstock perspective, there are no Irish companies with voluntary scheme accreditation (ISCC or EU RED Cert) which enables them to supply indigenous sustainable certified virgin oil feedstock to biodiesel producers. Even if there was, only 9% (0.35 million hectares) of utilized agricultural land in Ireland is allocated to cereals and crop production¹. With this area of land already being used to grow food and animal feed, combined with the fact that the national dairy herd is expected to grow by 1% in 2020 and 2021 (30,000 cows)², the pressure on availability of tillage and crop land intensifies. In the UK, 3 of the 4 ISCC accredited bodies which can supply sustainable virgin oil feedstock also have Biodiesel plants in Europe and thus are more likely to keep accredited material for their own biofuel production, rather than sell precious sustainably accredited feedstock elsewhere. After this it becomes uncompetitive to ship single counted material from Europe to Ireland and the benefit of double counting isn't in play. From the perspective of a biofuel plant commissioned post October 2015, production from a GHG savings perspective becomes increasingly difficult as default values for oilseed rape biodiesel are well below the 60% GHG savings threshold we are limited to. The above points combined with the proposed introduction of a 2% cap on food/feed based feedstock, 1% of which was already used for bioethanol in 2018, all but rules out the possibility of being able to produce indigenous 1st generation biodiesel to replace some of the volume which would be lost to the 1.7% cap of Annex ix Part B feedstocks.

Feedstocks that may fall under the umbrella of 'advanced feedstocks' for biodiesel, which defined in the USDA FAS EU Biofuels 2019 report as 'Other, pine/tall oils, fatty acids', made up only 5% (680 million litres) of the biodiesel & HVO feedstocks in the EU in 2018.³ As 2021 comes closer the demand for this small volume of feedstock is likely to increase EU wide especially from the rise of HVO plants.

Based on figures published by NORA for 2018⁴ Ireland's blend of feedstock from Annex ix Part B accounted for 98.7% (160 million) of the 162 million litres of physical biodiesel placed on the market. This accounts for 4.7% of the physical blend. If the cap of 1.7% is implemented in relation to 2018 figures, Annex ix Part B feedstock would only cover 58 million litres leaving a shortfall of over 100 million litres, to be covered by 'advanced feedstocks' which, as mentioned above, are in scarce supply and difficult if not impossible for many biodiesel plants to process due to their high acidic nature.

¹ https://www.teagasc.ie/rural-economy/rural-economy/agri-food-business/agriculture-in-ireland/

² https://www.independent.ie/business/farming/dairy/irish-dairy-herd-growth-is-starting-to-slow-down-and-could-stall-by-2022-38226858.html

³ http://agriexchange.apeda.gov.in/marketreport/Reports/Biofuels_Annual_The_Hague_EU-28_7-15-2019.pdf

⁴ The Biofuel Obligation Scheme Annual Report 2018

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

Answer:

College Biofuels considers the approach to be appropriate.

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?

Answer:

College Biofuels considers the approach to be appropriate.

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.

Answer:

With the renewed emphasis on 'Advanced Biofuels', we feel the process that is involved in applying for double certs for new 'waste or residues' should be altered.

Many potential "advanced feedstocks" will fall under the category of Annex ix Part A "Other non-food cellulosic material". At present the process of having to produce renewable fuel from this material in advance of applying for double certification is hugely costly to a producer and we see it as an unnecessary barrier.

We suggest a similar process to what is in place at present, the only difference being that all the required information is gathered and submitted by the producer, then checked, consulted on and either accepted or rejected by NORA and the DCCAE prior to placing the finished biofuel on the market. The set up at present does not prevent the biofuel from being placed on the market, but it places an unnecessary financial risk on the producer. If this change was implemented it would encourage producers to look at more alternative feedstocks. As we get closer to 2030 the mandate for Advanced Biofuels will increase and with this, there will be more pressure on fuel companies to meet the advanced biofuel mandate.

We feel it is in everyone's interest to give biofuel producers this opportunity to investigate new materials without having to invest heavily in purchasing, processing and selling on to the market, for it to then be rejected as a waste/residue feedstock and ultimately not being an 'advanced biofuel'.