



Submission to the
Department of Communications, Climate Action & Environment,

on the
Biofuels Obligation Scheme

From:
**Cré – Composting and Anaerobic Digestion
Association of Ireland**

&
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1. Introduction

Cré and IrBEA welcome the opportunity to comment on this consultation. Both organisations have a MOU and are working together on behalf of our members for the development of an Irish Biogas Industry.

IrBEA

IrBEA was founded in 1999. Its role is to promote the bioenergy industry and to develop this important sector on the island of Ireland. The diverse membership includes farmers and foresters, fuel suppliers, energy development companies, equipment manufacturers and suppliers, engineers, financiers and tax advisers, legal firms, consultants, planners, research organisations, local authorities, education and advisory bodies – anyone with an interest in the bioenergy industry. IrBEA is recognised by Government and agencies as the voice of the bioenergy industry.

The association's main objectives are to influence policy makers to promote the development of bioenergy, and to promote the interests of members. Improving public awareness, networking and information sharing, and liaising with similar interest groups are other key areas of work in promoting bioenergy as an environmentally, economically and socially sustainable energy. The organisation is a self-governing association of voluntary members and is affiliated to Bioenergy Europe and the European Biogas Association (EBA). The organisations activities are managed by the CEO assisted by a small executive staff team and is governed by a board of Directors which includes an elected President and Vice President. Policy direction is provided by a Management Executive Committee and specific subcommittees. Further information on the association is available at www.irbea.ie

Cré

Established in 2001, Cré is the Composting and Anaerobic Digestion Association of Ireland. Cré (which is the Irish word for 'soil'), is a non-profit association of public and private organisations, dedicated to growing the biological treatment sector. Cré supports the production of high-quality outputs, assists the delivery of Government waste diversion and bioenergy targets, and promotes the creation of sustainable indigenous jobs.

Cré has a broad membership base ranging from compost and anaerobic digestion facilities, waste companies, local authorities, technology providers, local authorities, consultants and third level colleges. Cré is recognised by Government and agencies as the voice of the industry in Ireland and Northern Ireland. It is frequently called on to give the industry view on future policy and legislation. Cré is a member of the European Compost Network, the European Biogas Association and the Biobased Industries Consortium. Cré has a Board of Directors, a Carbon Committee, a Technical Committee, a Public Relations Committee and an Anaerobic Digestion Committee. See www.cre.ie

2. Anaerobic Digestion

Our joint submission is focussed on anaerobic digestion sector can contribute to Ireland's national interests. Often these benefits are not recognised and not assigned a value.

Anaerobic Digestion (AD) produces renewable biogas from materials such as agricultural and industrial organic residues and domestic and commercial food waste. It is a proven technology widely used across the EU and the world. It provides a constant (dispatchable) supply of electricity, gas and/or heat.

AD can help Ireland achieve its renewable energy targets for 2020 and beyond across all sectors, heat, electricity, transport. This can be achieved with no negative impact on the food supply chain capability in Ireland, and no significant change in land use.

Energy sourced from AD will diversify the national fuel mix, provide a more secure clean energy supply, and reduce the country's reliance on imported fossil fuels, whose prices are subject to global energy market trends.

This means it can be used to provide a stable base-load of renewable energy to the electricity grid and gas grid. The use of biogas from AD to provide pipeline quality renewable natural gas can enable Ireland to meet the RES-T transport and RES- H target using the natural gas pipeline, a significantly underutilised national resource.

AD can make a significant contribution to the management of organic waste in Ireland as well as helping achieve national and EU waste recycling targets. Rather than sending organic waste to landfill and land spreading, AD can convert this material to renewable energy and organic-rich fertiliser.

The challenge facing the agriculture sector to moderate its GHG emissions (32% of Ireland's total) and convert to a low carbon sector in the context of major growth to achieve the Food. Harvest 2020 targets, could be addressed by AD. It has the added benefit of significant job creation in the rural economy, another farm income stream and better control of energy costs for farmers.

A further benefit is the support AD provides for sustainable smart agriculture, a key component in the promotion of Ireland's food exports under the banner of the Bord Bia initiative, Origin Green.

AD provides farmers with a valuable recycled source of fertiliser, closing the loop on nitrogen and phosphorous management, providing environmental benefits by replacing artificial fertiliser and provides increased biosecurity by avoiding land spreading of untreated manures.

3. Responses

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 Biofuels used outside of the transport sector are referred to as bioliquids 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?

Cré and IrBEA Comment: Yes, Cré & IrBEA believes the stated blending are feasible, we consider that the blend rates are under ambitious and policy should seriously consider having far more ambitious blending targets. The BOS scheme should be extended to at least 2040 to provide clarity to the market and to allow facilities to be developed to meet the biofuel supply challenges. Facilities to produce biofuels, such as biomethane, take years of development and have significant payback periods for capital costs so without a longer scheme period (i.e., 20 years) it will not be possible to finance and develop this infrastructure. Otherwise we will have to continue importing biofuels from other countries where biofuel plants of significant scale already exist.

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

Cré and IrBEA Comment: The level of proposed changes going forward and end target in 2030 should be set out in the advance so that the market can fully understand future expectations. There should be an annual increase to create a smooth profile toward the 2030 target. We should aim to achieve the 2030 target sooner than planned given the climate emergency but there should also be consideration of post-2030 targets in the scheme looking further toward a net carbon zero position by 2050 as outlined in the Climate Action Plan. There is no technical reason to prevent Ireland striving to meet the stated 2030 target well in advance of 2030, and extending the 2030 target well above what is currently envisaged.

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.

Cré and IrBEA Comment: In this response Cré and IrBEA are specifically focussed on biomethane and hence new fleet vehicles will run on 100% biomethane fuel.

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

Cré and IrBEA Comment: *n/a*

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

Cré and IrBEA Comment: *n/a*

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

Cré and IrBEA Comment: For the case of biomethane it can be used up to 100% blend.

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

Cré and IrBEA Comment: No currently, however if supported by this scheme the industry will generate sufficient quantities.

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

Cré and IrBEA Comment: There should be a floor price for biomethane to give certainty for funders. We also consider that government should lead by requiring all state fleets to convert to high blend levels for all vehicles, and the conversion of all suitable fleets to biomethane. We would consider that the state should steer public procurement of vehicles in the direction of a decarbonised fleet starting in 2020.

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

Cré and IrBEA Comment: The cost impact on consumers will be very much reliant on the cost that certificates can achieve. Therefore to prevent an impact on consumers of biomethane we would advise that a base price for certificates be considered. We would note that the obligated parties will favour the sourcing of either biofuel or BOS certificates from the cheapest source possible – because of this the consumer will benefit from the lowest cost technology available.

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?

Cré and IrBEA Comment: The timing of the proposed changes from the beginning of 2022 appears to be the fastest possible time to implement the changes. While it assists stakeholders needing this time to plan for the new obligations it is far short of the pace of change required to transit to a decarbonised fleet. It is important to ensure that the necessary arrangements are progressed in the interim during this transition period. The biofuel obligation should in the interim year of 2021 be increased to ensure a smoother transition from the 2020 target to the proposed changes that will take effect from the beginning of 2022.

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?

Cré and IrBEA Comment: Yes, the timing of the proposed changes from the beginning of 2022 is appropriate as all stakeholders need this time to plan for the new obligations. However, it is important to ensure that the necessary arrangements are progressed in the interim during this transition period. There should also be an increase to the biofuel obligation in 2021 to ensure a smoother transition from the 2020 target to the proposed changes that will take effect from the beginning of 2022.

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 biofuels²² 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?

Cré and IrBEA Comment: Yes, this would be a welcome introduction as advanced biofuels, such as biomethane, can play a significant role in decarbonising the transport sector. However, there should be interim targets between 2022, 2025 and 2030. We suggest there should be annual increases to ensure a smoother profile toward the end target and avoid sudden jumps in the market.

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

Cré and IrBEA Comment: Biomethane is an indigenous renewable resource both an alternative fuel and an advanced biofuel that can make a significant contribution to this obligation. Biomethane also offers much wider benefits such as sustainable waste management reduction of GHG emissions from agriculture through manure storage and nitrates production. The creation of rural jobs is a significant advantage that biomethane can add to the Irish economy.

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?

Cré and IrBEA Comment: Yes, the obligation should be expanded to include all transport.

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?

Cré and IrBEA Comment:

Our understanding is question 7 means Bio-CNG produced from biomethane. In this case our response is yes. However we would clarify that we would not consider it appropriate to exempt fossil fuels such as CNG or LNG from 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?

Cré and IrBEA Comment: Yes

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?

Cré and IrBEA Comment: Yes, because energy produced from waste has significant GHG offset benefits and this should be reflected in the support given.

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

Cré and IrBEA Comment: While there may be an increased risk of fraud this can be mitigated by having an appropriate level of checks and compliance audits.

Question 10: Under the recast Renewable Energy Directive and the subsequent delegated act²³, 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?

Cré and IrBEA Comment: Yes, we agree with the proposed approach.

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?

Cré and IrBEA Comment: We would caution against setting mandatory limits that set maximum inclusion levels without having any regard to advancing technologies and knowledge. Given the extended timeframe of the BOS to 2030 and beyond we would advise that flexibility around any limits be considered, and based on scientific evidence that either exists today or emerges in the coming years.

Question 12: The recast Renewable Energy Directive includes a 1.7% limit on biofuels produced used cooking oil (UCO) and animal fats²⁴ 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?

Cré and IrBEA Comment: This limit should be achieved through the use of indigenous fuels as a priority and where available. We do not agree with arbitrary limits of 1.7% being set. The goal is GHG reduction and all targets limits should be linked to same.

(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?

Cré and IrBEA Comment: An argument can be made in favour of increasing this limit if indigenous supplies are available to achieve it. It should be noted that the majority of biofuels from these sources are currently being imported.

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?

Cré and IrBEA Comment: Yes, we agree.

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?

Cré and IrBEA Comment: Yes, however, we suggest there should be annual increases to ensure a smoother profile and to avoid sudden step changes.

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?

Cré and IrBEA Comment: This approach is agreeable but should be restricted to *force majeure* type circumstances rather than market events to provide certainty to investors.

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?

Cré and IrBEA Comment: We believe an obligation scheme for the heat sector would be a beneficial development as it would provide additional opportunity to help achieve the EU renewable heat targets. AD and biomethane can play an important role in this as set out in Section 2.

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

Cré and IrBEA Comment: Notwithstanding the technical challenges raised in previous consultations regarding use of bioliquids in the heat sector, there are no technical barriers to injecting biomethane into the gas network to blend it with natural gas as is common practice in many other European countries including our nearest neighbours in the UK. From a regulatory perspective the necessary quality protocol and other procedures are already in place/need to be adopted but these are at an advanced stage of development and there are no barriers to implementation foreseen. Using a system similar to the biofuel obligation scheme in the heat sector will allow parties meet their obligations through buying credits on the market should they be unable to meet their targets by using biofuels for technical reasons.

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

Cré and IrBEA Comment: The level of obligation should be sufficient to meet Ireland's 2030 target for renewable heat as well as considering future objectives beyond 2030 toward the zero-carbon target in 2050.

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.

Cré and IrBEA Comment: We welcome the proposed addition of a separate Advanced Biofuel Targets and multipliers for certain biofuels as fuels such as biomethane can make a significant contribution to achieving offsetting of GHG emissions from the transport sector, particularly when they are produced from waste materials. This reflects and will capture the additional benefits that biomethane from AD projects can deliver. The provisions aimed at ensuring sustainability of biofuels and avoidance of indirect land use change are also supported from a GHG emission reduction perspective.

However, the proposed term is not long enough to allow investment in indigenous biofuel production facilities and it needs to have an extended duration of at least 20 years to allow adequate return on investment and market certainty. Otherwise we will continue to rely on imported biofuels from other parts of the world which generates avoidable GHG emissions associated with their transport to Ireland. Furthermore, this would result in missing the opportunity of the many socio-economic benefits that could be achieved in Ireland including local investment and job creation.

As the gaseous biofuel offtake market for transport is currently quite limited in Ireland, any future scheme which issues certificates based on offtake volumes will compel long term offtake agreements to satisfy infrastructure funding requirements. Given the nature of the offtake market in Ireland, such long term arrangements will be difficult to acquire and without these agreements it will be extremely challenging to secure capital investment for construction of biofuel production infrastructure. Therefore, if biofuels, such as biomethane, are injected into the gas network certificates should be issued on the basis of the amount of biofuel injected. This will offset fossil fuels in the wider energy system even if not used directly in the transport sector i.e., any excess energy could be allocated toward renewable heat targets. This could be facilitated if an obligation scheme for use of renewable energy in the heat sector is also implemented as proposed in Part 2 of the Consultation on the Implementation of the EU's Clean Energy Package document and the certificates were inter-tradable between the two schemes (i.e., Biofuels Obligation Scheme and Heat Obligation Scheme).

In the event that targets in the scheme are achieved, this is likely to cause a crash in pricing of certificates being traded and therefore the Department should undertake to increase the targets for future periods in those circumstances. This will be important to giving confidence to investors in biofuel facilities to supply the market. A similar mechanism is in place for the UK ROC regime.

Transport is probably the most relevant sector for biomethane as it is the least decarbonised sector and requires the least incentive¹ per tCO₂. As expected food AD plants requires the least incentive to allow financial stability and certainty of development. On farm AD plants require a greater incentive

¹ The role of Incentivising Biomethane in Ireland Using Anaerobic Digestion. EPA Research 2016.

as they don't get a gate fee for feedstocks and the gas yields are lower from some manures compared to food waste.

In addition, imaginative targeting is required of exchequer incentives for short periods to encourage those changing their vehicles choose a low emissions alternative. For example, 45% of the Irish Heavy Goods Vehicle (HGV) fleet is 10 years or older according to the CSO Road Freight Survey 2018². This presents an opportunity to use imaginative targeted incentives to encourage fuel switching to lower emission vehicles or zero emission vehicles (e.g. gaseous fuels) through a vehicle scrappage scheme.

The percentage of registered vehicles classified as HGVs is 4%; however, the Sustainable Energy Authority of Ireland (SEAI) 2017 Energy Statistics in Ireland 2017 estimates that they were responsible for 30% of road traffic CO₂ emissions (18% of total transport emissions).

² Response Rate by age and unladen weight of Vehicle, 2018.