Inver Energy & Greenergy Fuels Ltd Response

Biofuel Obligation Scheme

Consultation on 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

Consultation Questions:

Question 1:

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

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

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

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

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

Inver welcomes the proposal to increase blending rates as these levels would be required to meet the 14% target set out in 2030. The implementation of E10 will make the targets even more feasible. We see these targets as being feasible to achieving the targets. There is enough installed production capacity for Biodiesel and Bioethanol to support these increased blend rates.

However, with Ireland expecting to maintain a 2% Crop-Cap, overall target will reduce to 9%, as per the clause in Article 26(1) of RED II. On that basis, the targets won't be ambitious enough as blending rates will decrease in order to meet the 2030 target.

The higher blending levels, should be maintained through to at least 2030 to encourage investment in Biofuel technology.

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

The trajectory is already mandated by RED II which allows suppliers to invest in long term strategies. We support the incremental increase and would suggest that they remain consistent with the suggested trajectory. The UK blend targets have been set for the next 12 years and we'd encourage Ireland to adopt the same long term approach. The certainty enables for investment in technology and infrastructure ensuring the country remains at the forefront of achieving the European Biofuel mandates.

Question 2:

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

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

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

There are challenges that need to be addressed before this can happen:

- The introduction of E10 will need to be led by the government. Firstly, to remove the need for a 'protection grade' and secondly, allow suppliers to blend and deliver E10 grade Gasoline to forecourts.
- E10 would need to be supplied as a replacement for E5, not in addition to. This is due to negate the need for significant investment in infrastructure as most filling stations only have 1 grade of Gasoline.
- Consumers need to be made aware of any potential issues surrounding their cars suitability for E10. There is a possibility that a scrappage scheme may be required for older cars deemed unsuitable for E10. Government would need to liaise with the relevant stakeholders regarding this matter. That being said, the number of cars incompatible with E10 would be insignificant and should not prevent the move from E5 to E10.
- Security of supply of BOB imports may be of concern if Ireland moves to E10 ahead of the UK. Approximately 1/3 of Irelands gasoline comes from the UK. E10 BOB would need to be sourced from Rotterdam instead, at a higher cost.

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

EN 590 diesel specification sets a limit of 7% Biodiesel inclusion in Diesel. It should be noted that to achieve a blend of 7% FAME through the Winter months is challenging. This is due to the cold flow properties of FAME and its tendency to cause filter blocking issues at low ambient air temperatures. It is possible to achieve higher blends in Winter by utilising crop based Biodiesel. In the UK, there are high bioblends achieved throughout winter using this method. Waste based Biodiesel blending can be maximised in the summer to B30 levels for fleet operators.

B20 is regularly supplied into the UK market for fleet and there are no compatibility concerns with this.

B12 can be achieved using existing Biodiesel feedstocks/specifications.

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

Regarding gasoline blending it is anticipated that ethanol will be the biofuel used to meet an E10 grade. There is an option to also start blending Bio-Methanol as well, depending on availability. Currently most of the ethanol available in the market is from food and feed crop, although it would be expected that technologies utilising waste streams will mature. Advanced Biofuels will also be utilised in Biofuel blends. Greenergy are currently sourcing Advanced Feedstocks which will be blended towards meeting Advanced Targets throughout the decade.

Regarding Biodiesel blending, it is anticipated that FAME (mainly UCOME and TME) will be crop used. As stated in part b), higher winter blending can be achieved by blending crop based Biodiesel such as Soybean or Rapeseed Oil.

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

There are no concerns about the availability of UCOME or Ethanol. Expected Biodiesel supply in Europe will be 16.4m Tonnes in 2020 and 6.4m Tonnes for Bioethanol.

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

Consumers will need to be made aware of the change to E10/B12 prior to market entry. This will need to happen through a government led information programme as is currently being undertaken in the UK ("Know Your Fuel" campaign).

Educating and supporting industry to use high blends:

- Public services to use high bio blend fuels

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

Regarding cost increases to the consumer, there are a few items that will result in consumer prices increases:

- Increasing costs of Biodiesel supply due to increased UCOME usage B7 to B12 would result in an increase of
- If suppliers choose to try and meet mandates using HVO, this is an expensive alternative which results in high costs/litre – HVO is roughly $350/mt more expensive than UCOME. The increased blending costs would be passed on to the consumer.
- Advanced biofuels are also in short supply. If the fuel supplier cannot place the required volume of advanced biofuel on the market due to a shortage of supply the buy-out will be passed through to the consumer.

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?

This proposal aligns the functionality of the system with the FQD for 2020. Overall, an energy based system is more representative of achieving/meeting the RED targets. BOS submissions still need to be on a volumetric basis as the Irish fuel industry operates on a volume basis, levies and taxes and based on volume (std. litres).

The BOS Team/System needs to convert the volume to energy.

With regards to converting to energy targets, it is recommended that the equivalent energy target is set using the split of fuels on the market in the prior year. For example, if the diesel/gasoline split on the market in 2021 is 75%/25% then this needs to form the basis of the calculated energy targets for 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 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?

As the consultation process has already begun, we feel that a realistic introduction would be for 1st January 2021. This shows Ireland being at the forefront of the Biofuel targets in Europe.

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[22] 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?**

Inver agrees that the Advanced Biofuel Target should come into force as a sub target of the BOS. Currently there is a limited supply of Annex IX Part A biofuels on the market making the target difficult to achieve, especially as the rest of Europe also implements this target. Consequently, there is a high risk that the targets will not be met, until Advanced Feedstock production increases. In the interim, the buy-out will likely need to be paid with costs being passed on to the consumer.

We think the Advanced Target should be implemented as early as the legislation allows; 1st January 2021. The sooner a market is created for these feedstocks, then suppliers are

incentivised to invest in scaling their operations.

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

Biofuels produced from feedstocks listed in Part A of Annex IX, RED II – subject to their being sufficient supplies of this product at a commercial level. The feedstocks are most likely to be imported into Ireland, on a Mass balance basis. Some Irish biofuel production plants, with investment, could produce Annex IX Part A feedstocks such as:

(d) Biomass fraction of industrial waste not fit for use in the food or feed chain, including material from retail and wholesale and the agro-food and fish and aquaculture industry, and excluding feedstocks listed in part B of this Annex.

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?

We believe Road Transport should be obligated.

Rail transport should be an obligated supply due to the Gasoil that the industry currently relies on. This expands the opportunities to blend high biofuels.

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. Members 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?

Inver believes that any fuel derived from Fossil Fuel and utilised in transport (Road and Non-Road such as Rail) should be obligated as these fuels are used in transport and therefore are part of the RED II targets. CNG and LNG are currently predominantly Fossil Fuel based so should not be given any exemptions as it puts these fuel types at a competitive advantage with very little or no Carbon Benefit.

Any fuel type derived from Renewable Sources (including LNG and CNG) should be exempt as long as the supplier can prove the traceability of the feedstock, either through a Voluntary Scheme or through independent verification. The BOS Team must be willing to make considerations as and when new technologies become commercially available, specifically with Renewable Fuels from Non-Biological Origin.

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?

Inver agrees with the approach to issue credits should the system move to energy basis. This aligns with the FQD methodology and also provides a clear reference to the 2030 RED II target of 14%. Volumes should still be entered into the BOS systems and the system should calculate the energy content to ensure consistency in calculating energy savings/emissions. This also makes verifying the NORA Levy easier and associated Carbon Taxes.

Energy Credits should only be awarded for the renewable content of fuel supplied into the market. In terms of Electricity used in Road Vehicles, the UK has a default value for emissions per kwh. This is based on the Fuel Mix Disclosure (FMD) provided by Ofgem and BEIS. The UK government encourages the reporting of actual verified data by applying a downward adjustment of 20% to any estimated data using FMD.

Question 9:

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

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

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

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

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

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

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

The application of multipliers has already proved successful in current markets in incentivising Waste based Biofuels over Crop. We support applying multipliers to Annex IX feedstocks as written in RED II.
Regarding Aviation and Maritime we support rewarding bio energy in these sectors. If the Bio source is an Advanced Feedstock (Annex IX Part A) then the x2 multiplier is sufficient, however

for if the source is an alternative then no multiplier should be applied and it should be treated as other biofuel types in Road, to ensure harmonisation across the whole transport sector.
HVO could be used to produce substitute Diesel/Kerosene, used in Marine/Aviation and therefore negatively impact the Biodiesel supply chain due to the incentive to supply these to Aviation/Maritime instead.
Renewable electricity will have an increasing role in decarbonising transport, so should be obligated. Any incentive to electricity in Road/Rail should only be applied to renewable content of the supply.

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

Fraud is not tolerated in the market. Fuel suppliers must be able to rely upon the integrity processes of the certification bodies, throughout the entire supply chain. The further strengthening of these schemes is the best way to ensure that opportunity for fraud to occur is removed. Due to the global nature of supply chains any solutions, including central databases would need to extend beyond the EU. Maintaining incentives for certain feedstock (multipliers, double counting) is necessary to allow for investment in technology.

Audit requirements on supply chains should be deemed high risk and audited appropriately.

Question 10:

Under the recast Renewable Energy Directive and the subsequent delegated act[23], 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?

The approach supports and is fully aligned with the requirements of the recast RED for high risk ILUC feedstocks. It is noted that the directive does introduce an exemption from these restrictions for bioliquids and biomass fuels certified as low ILUC-risk, where production is considered as beneficial, even where these feedstocks are predominantly high ILUC.
We believe industry should be challenged to come up with methods to verify low ILUC production streams and be exempted from the cap.

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?**

Irish market conditions do not currently rely on food/feed crops. Currently the market is operating with ~0.75% by energy of food and feed crop biofuels, predominantly from 5 vol% ethanol blended into gasoline (based on a market split of 25%/75% gasoline/diesel). If the market moves to 10vol% ethanol blending with the same gasoline/diesel split, then there would be ~1.5% by energy from food and feed crop biofuels.

The 2% limit only becomes problematic if the market share of gasoline increases to >35% when on E10. Therefore, we request a bi-annual review period to review this target with a view to increasing if necessary.

Question 12:

The recast Renewable Energy Directive includes a 1.7% limit on biofuels produced used cooking oil (UCO) and animal fats[24] 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?

As indicated in the consultation, in 2018 biodiesel placed on the market in Ireland represented around 3% in energy terms of the energy used in the transport sector. As the BOS obligation increased to 10% volume in 2019, biodiesel placed on the market in 2019 looks like it will represent just over 3% in energy terms of the energy used – 22% year on year increase. In 2020 the BOS obligation will increase further to 11% by volume resulting in the biodiesel share of the market increasing to over 4% by energy terms. This is considerably higher than the 1.7% allowed under the recast RED.

Inver disagrees with the 1.7% limit and believes this should be increased to 5%. There is already a cap on the food and feed crop volumes that can be placed on the market. To add another cap on the Tallow and UCO allowed would greatly reduce the operational flexibility required by the industry to meet the challenging biofuel targets set out.

To achieve the 9% obligation in 2030, with E10 blending maximised, the required energy contribution from Biodiesel will be 7.89% to meet the obligation (4.11% on volume).

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?

Using 2019 NORA Levy statistics, Ireland's Biodiesel consumption, represented as energy, is set to hit 3.36% (6.51% reflecting double counting). Assuming B12 is introduced during the next decade, expected consumption will be 7.33% on an energy basis, equivalent to 13.65%. The required Biodiesel contribution to meet the 9% Energy Target (14% - 5% offset of lower Crop-Cap) would be 7.85% resulting in 4.31% on volume – 205kt required.

The 1.7% cap is prohibitive and will mean Ireland will be unlikely to hit their mandates in 2030 as the 1.7% limit means Biofuel Energy contribution to be just over 4% of fuel demand (not taking into account Advanced Biofuels or Electricity/CNG/LPG).

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[25].**

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

It's agreed that excess energy credits in excess of the 2% crop-based limit cannot be carried forward into the following year for the supplier who generated them.

Inver does not agree that the excess credit carried forward can only be used to meet the biofuel obligation and not the advanced biofuel obligation. If there are advanced energy credits in excess of the advanced energy target for that year, then these should be carried over and allowed to contribute to the advanced energy target for the following year (e.g. if there is greater than 0.2% advanced biofuel placed on the market in 2022 by a fuel supplier, then the additional energy credits applied to the advanced biofuel should be allowed to be

carried over and go towards the advanced biofuel target for 2023). This is a necessary requirement for operational reasons to allow for optimum parcel sizes of advanced biofuels to be purchased. These parcel sizes may be in excess of the quantity required in a given year, therefore there needs to be flexibility to allow for the excess to be carried into the next year.

The application of 30mj per ticket should be done on an actual basis, not average as suggested. BOS will have the data already in the system and should apply the actual credits carried over.

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?**

The incremental increases in the buy-out charge is supported if E10 is introduced into the market, which needs to be led by the government.

The Advanced Buy-Out cost should be aligned with the normal Buy-Out charge. As short-term availability of Advanced Biofuels will be limited, the market will be unlikely to meet it's obligations. Consequently, these costs will be passed to the consumer resulting in higher fuel prices.

The non-compliance also would lead to an increase in the Carbon Tax with this cost ultimately being passed on to the consumer as well.

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 supplies 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?**

Inver does not agree that the approach is correct. In the event of a significant emergency that interrupts operational blending at terminal level it should not be up to the oil industry to shoulder additional burden of achieving biofuel targets.

Once a product is released to the market unblended it cannot be undone. In the case of an emergency where product is released to the market without biofuels then it is impossible for the oil industry to catch up without the imposition of significant cost to the consumer by blending HVO, to get around blend walls etc.

An emergency should be treated as a force majeure scenario and that all product released to the market during these defined periods should not fall under the obligation.
Any dispensation/flexibility made by the minister should not mean any catch-up is necessary at a future date.

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?**

An obligation scheme should be introduced into the Heat Sector. Heating oil is predominantly Kerosene which is carbon intensive and should be part of the Carbon Commitment of the country/Europe.

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

As there is no current incentive to supply bioliquids into the heating market, consultations on this area needs to happen first. Also, in the short term, incentivising bio blending into heating fuel will allow for investment and research in this area.

The initial introduction of FAME/UCOME can itself lead to problems for fuel systems, even where good housekeeping measures are in place. Particulates and other residues can be dislodged, blocking filters (where fitted), fuel lines and burners. Additionally to this, there may be some retrofitting to existing Heating systems to cope with bio inclusion.

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

Any obligation rate in the heat market should be at a lower rate than the main obligation. A heating obligation to contribute to the overall target without becoming a tax, if the full rate was applied. A suggestion could be to align the rate with the Advanced Biofuel rate. Demand is expected to exceed supply, so its inclusion in heating fuels could prove both expensive and may not increase the amount of blended biofuel.

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.

Fuels Quality Directive

At the time of writing of this submission there is a lot of uncertainty around FQD and whether the 6% GHG reduction target will actually expire post Dec 31st 2020. IPIA would like to note that if the 6% GHG reduction target is extended to beyond 2020 then this BOS consultation would need to be re-visited. The targets set out in this consultation would not align with FQD, consideration would need to be given to whether BOS should operate on a GHG basis and not energy, FQD non-compliance would need to be reviewed.