Public Consultation on the Biofuels Obligation Scheme

Response: P Finnegan

Introduction

This is a parallel set of recommendations to those sent previously to the equally parallel DCCAE consultation on implementation in Ireland of the Clean Energy Package (CEP)¹

They are designed to be considered (and hopefully, implemented) as part of an integrated package aimed at jump starting a much-needed phase shift in Ireland's ambitions for, and approaches to, total decarbonisation of the economy over the next 2-3 decades.

Similarly, both sets of parallel recommendations derive from, and are complementary to, a set of recommendations previously sent² to DCCAE as part of the consultation held on the (apparently still to be finalised) draft NECP.

Equally, therefore, both sets of (the more recent) parallel recommendations are designed to be considered (and hopefully, implemented) as part of a much-needed, integrated, whole-of-government approach to rapid and total decarbonisation of the Irish economy.

'Joined-up' climate policy is a claim that has been frequently staked (much more frequently, it seems, in press releases than in any evaluation documents, in Ireland as elsewhere) over the 25 years since the United Nations Framework Convention on Climate Change (UNFCCC) entered into force.

Whatever about the immense amount of time-consuming effort involved in drafting the EU's legislative framework against climate change, it can at least make a reasonably fair claim that a fair attempt at joined-up legal policy is one of its hallmarks.

That EU law is a primary basis for Irish policy is reflected both in the fact that this consultation (along with others already mentioned) is being held in the first place, and secondly, that the principal substantive legal bases for Irish climate policy (as described in the National Policy Position of 2013³) are, in fact, specified as any commitments deriving from UNFCCC, and *'existing and future obligations of the State under the law of the European Union'*

The comments, recommendations and answers offered here therefore (as in previous consultations) are designed to be taken within the perspective of a possible (and achievable) overarching, joined-up, whole-of-government climate policy for Ireland, <u>aiming at complete decarbonisation of the energy sector well before 2040.</u>

¹ Awaiting (25th November 2019) upload at https://www.dccae.gov.ie/en-ie/energy/consultations/Pages/Public-Consultation-on-the-Implementation-of-the-Clean-Energy-Package.aspx

² Available at https://www.dccae.gov.ie/en-ie/energy/consultations/Documents/42/submissions/Pat %20Finnegan.pdf

 $^{3 \} Available \ at \ \underline{https://www.dccae.gov.ie/en-ie/climate-action/publications/Documents/5/National\%20Climate \\ \underline{\%20Policy\%20Position.pdf}$

Advanced and concentrated total decarbonisation of Ireland's energy usage well before 2040 will be a necessary pre-requisite to the far more difficult and challenging task of rendering the non-CO2 sectors carbon 'neutral' by 2050 (as envisaged under the Climate Action Plan).

Within this context, some of the answers offered here to the questions <u>as posed</u> will be answered as, (variously) 'N/A', 'YES/NO', and/or 'See [another] answer'. This is not to avoid a question, nor is it the case that a possible answer couldn't be offered to the question if posed within a different context (and/or consultation).⁴

Rather, the answers supplied here are designed to be taken within the context of, and with regard to, both the previously mentioned recent responses to DCCAE, as much as to the very many previous consultation responses sent to various Departments (of the Irish government) over the last 21 years or so.

It should also be very much noted that all answers provided here to the questions as posed here are given with a view to generating joined-up government policy aimed at Ireland <u>maximally exceeding</u> the requirements of the Renewable Energy Directive (RED).

Article 25, para 1 of the RED reads: 'In order to <u>mainstream</u> the use of renewable energy in the transport sector, each Member State shall set an obligation on fuel suppliers to ensure that the share of renewable energy within the final consumption of energy in the transport sector is <u>at least</u> 14 % by 2030 (<u>minimum share</u>)...' (Emphasis added)

Answers provided here aim to improve Irish implementation of the RED <u>well beyond the minimum</u> target set by the RED for 2030, such that the objective of 'mainstreaming' the use of renewable energy (RE) in transport in Ireland does indeed approach any conventional interpretation of 'mainstream' (i.e. > 50%) by 2030.

There exists absolutely no legal barrier to Ireland (or any Member State) aiming at, and/or achieving, an overshoot on the RED. In fact, the preambular text to the RED, in particular, makes abundantly clear that the current RED targets are set as an absolute minimum ad interim.

Further, the same Article 25, para 1 (quoted above) <u>requires</u> the Commission to re-assess the RE in transport (RE-T) obligation 'with a view to submitting, by 2023, a legislative proposal to increase it in the event of further substantial costs reductions in the production of renewable energy, where necessary to meet the Union's international commitments for decarbonisation, or where justified on the grounds of a significant decrease in energy consumption in the Union.' (Emphasis added⁵).

The first two of the specified conditions likely to lead to a full re-assessment and consequent stiffening of the RE-T target already appear (in late 2019) almost certain to be fulfilled.

In the light of this, the precautionary approach for DCAAE, as much as for the whole of government, should be absolutely aimed at frontloading efforts at operationalisation of <u>all elements of the RED</u> (including the Biofuels element under consideration here) at the earliest opportunity.

⁴ Please note also that, due to time constraints, not all questions posed in the consultation are answered here.

⁵ Green highlighting (and/or bolding, and/or underlining, within green highlighting) throughout = Emphasis (and/or high emphasis) added to quoted DCCAE and/or EU text

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. **Emphasis added**

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

YES/NO – It is almost impossible to take a view on an accurate answer to this question given the (lack of) information provided, and the disconnect between blending levels set by volume (to differing fuels) in the Climate Action Plan (CAP) and the requirement in the Renewable Energy Directive (RED) to meet a target set in energy.

Feasibility and ambition also very much relate to objectives. Answers given here relate almost entirely to an objective of substantially exceeding the RED RE-T targets through deploying measures aimed at switching as much as possible of the Irish transport sector to renewable electricity between now and 2030 - i.e. well beyond the apparent objective(s) set out in this consultation. (See also subsequent answers)

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

YES/NO—Increasing the biofuel obligation rate is only appropriate in so far as a) it decreases the use of fossil fuels, b) it dis-incentivises an immediate and precipitous switch to biofuels, c) it encourages and enables early switching to electric transport <u>powered by renewable energy</u> in all currently fossil fuelled transport modes. (See also answer to Q.2, next)

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?
- (b) What do you view as the technical and consumer challenges associated with a blending level of 12% by volume in diesel on average?
- (c) What types of biofuel would you expect to be used to meet these increased blending levels?
- (d) Are such fuels available in sufficient quantities to meet the needs of the Irish market?
- (e) What actions are needed (outside of the Biofuels Obligation Scheme) to support the increase in blending levels (e.g. consumer communication)?

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

(2a-2f inclusive): Blending levels set at these rates (possibly even beyond) will undoubtedly lead to a degree of both technical and consumer attitude challenges. This is as it should be. The overall objective (as already stated) should be to harness any such challenges in a drive for rapid electrification (powered by renewable energy) of the entire Irish transport sector. This obviously involves a) price signals created by market reform in favour of rapid and wholesale decarbonisation (See in particular therefore, the answer provided to question 8) and b) government policy and consumer communication also aimed at creating rapid and wholesale decarbonisation of the whole Irish economy (i.e. not merely confined to transport)

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.

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

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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?

YES/NO – The proposed timing is only appropriate <u>providing</u> the changes to the scheme take full account of the impact on renewable electricity. Article 27 para 3 of the recast Renewable Energy Directive states:

For the calculation of the share of renewable electricity in the electricity supplied to road and rail vehicles for the purposes of paragraph 1 of this Article, Member States shall refer to the two-year period before the year in which the electricity is supplied in their territory.

It is unclear from the information provided for this question as to whether, how, or if, the calculation and crediting of renewable electricity in transport has been considered and catered for, <u>particularly with regard to the 2 year + 1 period referred to in this article</u> (See also the answer provided to question 8)

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.

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

YES/NO – The incentivisation of biomethane is to be strongly encouraged given the enormous quantity of freely available renewable energy wasted in Ireland on a daily basis (persisting for many decades already) through the unconscionable wholesale dumping of (not just) 'mixed municipal waste and animal manure', but even more seriously and unconscionably, human sewage from municipal and septic tank treatment sites.

This is an enormous national resource of potential renewable energy that is still (in late 2019) being left almost entirely unharnessed and (largely) merely dumped into the environment. That said, utilising this resource for RE-T, as opposed to using it for heat (RE-H) is almost certainly a highly inefficient, technically cumbersome, challenging and costly objective compared to the alternative approach of concentrating on RE-H. Government therefore needs to calculate very carefully, and calibrate accordingly, the degree of advanced biofuel obligation required under the transport scheme *vis á vis* the degree required under the parallel Energy Efficiency Obligation Schem (EEOS).

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

As well as the fuels already mentioned, there is (has been for decades) significant potential in Ireland for
biomethane from crop wastes, horticultural and forestry residues, and particularly (so called) commercial
food 'waste'.

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.

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

Article 27 para 1, subparagraphs a (denominator) and b (numerator) both <u>require</u> that <u>both</u> road and rail be included (<u>'shall</u> be taken into account')

So the approach to include them is not only appropriate <u>but legally binding on Ireland</u> (as much as in all other Member States)

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.

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

(Qualified) YES - Article 25 para 1, 2nd subparagraph specifies that: 'Member States may 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.'

This wording does <u>not</u> legally <u>disallow</u> any Member State from <u>also taking into account</u> the general direction and overall aim of government policy, so long as it is oriented at meeting (preferably exceeding) the RED targets, which may, or may not, also include an ambition to have its transport sector largely based on one or other fuel in preference to others, notwithstanding any relevant technological maturities and/or costs.

Indeed, the whole tenor, tone and legal basis of the Directive (as with the whole of EU climate policy) is to absolutely advance decarbonisation of the economy at every achievable level, and at the maximally achievable rate.

Thus if Ireland (or any Member State) wishes to prioritise the development of RE-powered electric transport over any other alternative minority form (e.g. CNG, LNG or hydrogen) to the current vast majority of fossil-fuelled transport, there would appear to be very little legal basis for anyone to prevent any such prioritisation or positive discrimination.

In order to facilitate such a transition in Ireland the categories proposed by DCCAE in this consultation need to be amended as follows:

- No obligation: Renewable electricity
- Half obligation: Electricity from the grid, CNG, LNG, hydrogen
- Full obligation: All other fossil-based transport fuels

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.

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, [sic] it is not intended to provide any energy credit for the supply of renewable electricity to road or rail transport.

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

ABSOLUTELY NOT - Quite apart from the careless typo in the last paragraph in this question (rendering the precise intention of the wording open to interpretation) it is assumed here that the correct wording is as highlighted in green in the relevant paragraph above.

By its own reasoning in this question (along with reasoning DCCAE has already previously applied to the casting of obligations) and not to mention <u>either</u> the identification (in section 3.2 of the consultation document) that <u>increased electrification of transport is one of two 'principal mechanisms</u>' to be deployed to meet the RE-T target, <u>or</u> the fact that (in question 1) the proposed blending levels <u>'together with the expected growth in electric vehicles'</u> will both be necessary to meet (but not exceed) the same targets - the proposal here <u>not</u> to credit electricity and <u>particularly not to credit renewable electricity is non-sensical by its own rights and by its own arguments.</u>

Disallowing credit for electricity and most particularly, disallowing credit for renewable electricity (RE-E) in transport will destroy at one stroke the principal mechanism by which Ireland would be able to decarbonise (in fact, rapidly decarbonise) the glaringly and shockingly out-of-control transport sector emissions in the national inventory.

Proposing to do so citing 'significant administrative burdens' is also non-sensical, given that final energy from electricity is recognisably more easily, and more accurately, measurable and verifiable than almost any other fuel used in Ireland. (And this is even before the proposed national smart-metering programme is rolled out)

Furthermore, claiming that to disallow crediting of electricity (and/or RE-E) is due to the fact that it is previously proposed it will have no obligation, while at the very same time allowing crediting for hydrogen, (when it will also not have an obligation) is completely false (and unconscionable) logic.

Very little (in fact no) detail is provided here on how exactly the crediting of the aviation and maritime sectors is envisaged to work.

Absent any detail (and particularly, any reference to any existing policy in this regard) given a) the known difficulties around bunkering (and accounting for bunkering), and b) the size of these sectors, it is impossible to approve here the proposal that they be creditable.