Consultation on Supporting Recycled Carbon Fuels through the Renewable Transport Fuel Obligation – REA response

The REA has over 550 members across the power, heat, transport, organics and clean tech sectors. The REA's Renewable Transport Fuel Forum has around 50 members with interests in fuel production, project development, supply chain and related areas. REA work streams of relevance to this strategy include waste management and regulation, biogas and biomethane, advanced conversion technologies and hydrogen.

We welcome DfT's intention to support RCFs. They have potential to increase the amount of low carbon fuels for hard-t0-decarbonise sectors such as aviation, shipping and off-grid heating and industrial heat, as well as presenting opportunities for UK investment. Where RCFs are used as Sustainable Aviation Fuel, our working assumption is that decisions arising from this consultation will be aligned wherever possible with the forthcoming SAF mandate.

We responded to the 2021 consultation, as well as taking part in an informal stakeholder in February this year. We are pleased to see that DfT has listened carefully to feedback from ourselves and others and has revised their proposals accordingly.

Criteria for eligibility

1. **Do you agree or disagree that a principles-based approach should be taken to determining RCF feedstock eligibility?**

We strongly agree with using a principles-based approach. In our response to the 2021 consultation, we argued that the approach originally proposed was unduly restrictive and that if was due to concerns around unintended consequences then it would be better to set out principles for determining whether a feedstock was genuinely residual waste and have the RTFO administrator make that assessment.

We note and support the statement on page 20 of this consultation that this approach would not affect eligibility of RCFs made from RDF or industrial waste gases:

> *'we have already committed to support RDF and industrial waste gases under the RTFO and so regardless of any additional criteria for feedstock eligibility, these two feedstocks will be eligible'*

2. **Do you agree or disagree with the proposed criteria? Are there any additional criteria we should consider?**

We agree with the proposed criteria, subject to our response to question 3, below.

3. What is your preferred option for determining feedstock eligibility? Please justify your answer and provide supporting evidence where appropriate/available. We also welcome feedback from stakeholders concerning how best to structure an annual assessment process

We agree with the proposal for a rolling assessment, for the reasons given.

We have had some concerns from members around whether eligibility determinations will be made public, perhaps in a similar way to determinations on whether certain feedstocks are generally considered wastes or residues. DfT should engage further on this, but it is important that the results of DfT's determinations do not compromise commercial sensitivities around individual project. That would suggest a process modelled on the current approach to determining eligibility to receive development RTFCs.

Given the critical importance of a determination of feedstock eligibility to a project's viability, members have stressed to us the importance of getting clear pre-approval from the RTFO unit as early in the project development phase as possible. The choice of feedstock dictates a large number of other elements of a project, so clarity on this will be needed long before a project can be readied for financial close, never mind start production of RCFs.

Similarly, once confirmation of eligibility has been given, the prospective RCF supplier needs to be protected from any changes in interpretation due to events beyond their control.

One example of this would be if the range of recycling techniques that are generally available expands so that material that would not currently be regarded as recyclable is seen as recyclable. This would appear to be covered on page 19 of the consultation by the reference to Best Available Techniques and that, in making a determination 'the RTFO administrator may also take into account new technological developments anticipated in the short-to medium-term, such as a recycling technology that is proven but not yet scaled-up'.

There is clearly a tension here between providing certainty to investors and flexibility to policy makers, given wide ranges of uncertainty in future waste management – the technologies, interaction with other policy areas and amounts and types of waste arising. Developers and their funders will require a clear approach on how such issues will be handled so that they can make their own judgement on whether the risks they are exposed to are manageable.

In managing these issues, we are also aware of a number of arguments around ways in which the existing waste hierarchy could be enhanced. We expect the government's forthcoming Biomass Strategy to add detail to the government's priorities for use of particular resources, with a focus on areas with relatively few alternative options. Within the transport fuels space, we look to the outcome of the Low Carbon Fuels Strategy to provide further clarity on these priorities – but it would appear that RCFs, particularly for use in sectors such as aviation, shipping, off-grid heating and industry would fall within this.

4. What is your preferred option for the minimum biogenic content requirement? Please justify your answer and provide supporting evidence where available

In our response to the 2021 consultation, we set out our concerns around the 25% biogenic limit then proposed. Such a limit would risk acting as a cliff edge to fuel producers as well as having potentially adverse impacts on alternative higher priority uses of biogenic material, and so undermining wider waste management policy.

We therefore strongly agree with the preferred option of having no default minimum biogenic content. The principles-based approach proposed provides the necessary assurance in terms of whether the feedstock being used is suitable, while avoiding the unintended consequences inherent in setting an arbitrary minimum biogenic requirement.

If DfT ends up deciding that some default minimum biogenic requirement is still required then setting this at a lower level of 10% would likely be reduced. So this would still be an improvement on the 2021 consultation, although in our view no minimum requirement is needed.

In the scenario of a minimum requirement being set, we support the proposal made on page 23 of the consultation, that 'where a producer puts in place processing technologies to separate biogenic content for alternative uses, such as anaerobic digestion, the RTFO Administrator may, on a case by case basis, permit the measuring of the biogenic content at an earlier stage in the supply chain for the purposes of meeting the biogenic content requirement.'

Ensuring that recycled carbon fuels are sustainable

5. Do you agree or disagree with the proposed approach for determining the counterfactual to be used?

We agree with the proposed approach. There is a clear benefit to having a single, default counterfactual and the ability to identify alternative counterfactuals on a case by case basis gives sufficient flexibility to the RTFO in circumstances where the default counterfactual would not be appropriate.

We also agree with the approach to identifying the counterfactual. We agree with the reasoning that an aggregate or plant-by-plant general approach would not give meaningful benefits compared to the proposed approach.

One point that is not addressed within the consultation is who the policy would operate if the non-default counterfactual is found to be landfill gas. This would challenge the whole basis of the GHG calculation methodology if the counterfactual is that the non-biogenic material would have been landfilled rather than being combusted. It would be helpful for the Government Response to address this point – would such a finding of a non-default counterfactual effectively render the feedstock ineligible for production of an RCF? Alternatively, will landfill be excluded from the counterfactuals that the RTFO Administrator is able to consider?

Given that the counterfactual will have significant impacts on GHG calculations, there needs to be greater clarity on the way in which changes to the administrator's approach would be made if this becomes necessary.

We note the statements on page 32 of the consultation that 'any decisions to include additional factors would be made through stakeholder dialogue with clear communication and appropriate lead times (eg coming into force in the following obligation year)'.

We welcome the intention for clarity, transparency and appropriate lead times. Where changes are of minor impact or make it easier for suppliers to comply with the RTFO requirements, then implementation the following obligation year would seem suitable.

This may not necessarily be the case, however, for project developers if the changes are substantial, or for installations already in construction, commissioning or production if the changes would risk RCFs not being able eligible for RTFCs that would otherwise have been eligible.

Since it is not possible to anticipate exactly what changes might be contemplated in future, the Government response to this consultation should set out that changes risking rendering previously eligible RCFs ineligible and that cannot easily (and cost-effectively) be mitigated should be implemented so that they only impact on new installations.

Since the RTFO does not accredit producer installations, this would be best done by having the new approach only apply to installations that commenced production/were commissioned on or after a specified date. The date should be chosen so that projects that had reached financial close or begun construction at the time the intention to make changes was announced should still expect to be protected from the effects of that change.

6. Do you agree or disagree that the grid average emissions factors for the most recent available year (ie the year preceding the year in which the RCF is supplied) should be used as the emissions factor for the displaced energy in the counterfactual?

We agree. This has the benefit of simplicity and of easy applicability regardless of the location of the RCF production plant, and we are not convinced that other approaches that could be devised are preferable.

On a minor point of detail, where page 34 of the consultation refers to the year in which the RCF is 'supplied', we assume this should read 'produced' – since it is the year of production of the RCF that is relevant.

7. Do you agree or disagree that the Efe factor for EfW (electricity only) counterfactual should be taken as 22%?

In our response to the 2021 consultation we highlighted that a figure of 26% was too high, particularly when taking parasitic load into account. We agree with using 22% as proposed.

We note that Tolvik's data show moderate fluctuations in efficiency year-on-year. It seems reasonable to pick a number and use it consistently rather than alter this each year, but it would be helpful for the Government response to set out whether or how this would be reassessed over time if a clear trend emerges in changes to this figure.

8. Do you agree or disagree with the proposed methodology for dealing with processing emissions and coproducts? If you disagree please describe an alternative proposed approach and provide any relevant evidence to support the use of this alternative approach

With regard to processing emissions, we agree with the proposed approach. We note that the key point (as stated on page 35 of the consultation) is that 'all emissions should be taken into account where they do not cancel out with the counterfactual use'. It follows from this that additional feedstock processing that would not have occurred in the counterfactual use would need to be accounted for in the RCF GHG calculation.

We understand from correspondence with the DfT team that CO2 emission from the feedstock that occur during the RCF production process (as opposed to external inputs to that process) would be excluded from the GHG calculation as those CO2 emissions would have occurred in the counterfactual use. We welcome this position as it fits with the policy intent and makes a very material difference to the resulting GHG values, and expect that this will be made explicit in the Government response.

We agree with the approach to co-product allocation. This has the benefit of consistency with the rest of the RTFO and other UK and EU policies that ultimately derive their approach from the EU's Renewable Energy Directives.

9. What is your preferred option for the GHG emission savings threshold? Please justify your answer and provide supporting evidence where available

We support the proposed approach as it enables the policy to seek higher real GHG savings over time while also protecting fuel producers and suppliers from the risk of grid electricity decarbonisation being slower than hoped for.

The proposal appears to be that the UK electricity grid will be used for all fuels, including those not produced in the UK. Assuming this interpretation is correct, it would be helpful if DfT could provide further clarification on how this would apply to fuels not produced in the UK, and whether or how this approach might be reassessed in the future.

10. Do you agree or disagree that the reporting and verification requirements for RCFs should be aligned with renewable fuels currently supported under the RTFO?

We agree with this approach, which is well understood in the RTFO.

11. Do you agree or disagree that RCF suppliers should be required to demonstrate compliance with the 'sustainable waste management criteria'? If you disagree, please provide alternative suggestions concerning how to mitigate sustainability risks

We agree that these criteria are appropriate and also support the intention to avoid unnecessary administrative burdens by deeming that these criteria would be met 'if they are already required by law in the location where the RCF production plant is located.'

Further clarity would be useful that this would still hold even if there is a degree of non-compliance with those local laws at the plant level– either directly in relation to the sustainable waste management criteria or some other element of their permit. This is not to suggest in any way that environmental protection laws should not be enforced but that they should be

enforced by the local competent authority rather than the RTFO. If the Government response is not able to make an unqualified statement that these criteria will be deemed to be met even in cases of enforcement action, then there would need to be a proportionate approach taken, given that minor non-compliances (actual or potential) are not uncommon.

In countries where suitable regulatory regimes are not in place, we agree with the proposal that this compliance with the criteria would need to be demonstrated based on the individual circumstances. We suggest that the reference on page 41 of the consultation to the 'individual RCF production plant' should be widened to include the locations where the feedstock is collected, sorted and prepared for use where that differs from the location of the RCF production plant.

Rewarding the supply of RCFs

12. Do you agree or disagree with our proposal that all RCFs should be awarded 0.5 dRTFCs per litre of fuel supplied? Please provide evidence to support your reasoning for a higher or lower level of reward

We do not believe that the award of 0.5 dRTFCs is sufficient to incentivise the production of fuels. If the support is set at that level, it is highly unlikely that RCFs will be produced, and the policy will not deliver the intended GHG benefits.

The analysis set out in the consultation ignores the cost of converting the RCF feedstock into an RCF. An economic operator that has one tonne of high value plastic has a choice between selling the material for recycling and converting it into a fuel. It will compare the revenue from the sale of the material for recycling to the profit that is generated from fuel conversion.

The value from recycling is tracked on the letsrescyle website. It has increased significantly since the introduction of Plastic Packaging Tax and its EU equivalent. The prices quoted in the consultation significantly undervalue recycling. The value of recycling is highly likely to increase over time because of regulation and voluntary action by consumer goods companies.

We are aware of work by our members that analyses the relative economic choices for recycling feedstocks or converting them into a RCF. This shows that it will always be better to recycle plastics than convert them into RCFs, even if the level of reward were set at 2 certificates per litre. We would encourage DfT to engage further on this. There is very little sense in setting a reward level for something in the RTFO that is so low that it is unlikely to incentivise significant amounts of fuel supply.

We would also note that, even on the analysis presented in this consultation, there is a very wide range of potential costs and it is only at the most extreme end of the ranges that the perceived risk to recycling occurs. DfT should do further work to narrow these ranges rather than taking an overly cautious approach just in case this risk materialises.

If these risks were to arise then the approaches outlined in the consultation around assessments for feedstock eligibility should be perfectly capable of addressing them, so long as suitable protections are put in place to protect projects that have already had significant amounts of time and money invested in them. A similar approach should be taken to that outlined in our response to Question 5.