Feedback of the ART Fuels Forum to the Inception Impact Assessment of EC on SAF – ReFuelEU Aviation

INTRODUCTION

The ART Fuels Forum (AFF) would like to respond to the Objectives and Policy Options put forward in the Inception Impact Assessment (IIA) of the European Commission. AFF would like to propose the following recommendations to the IIA to enable a supportive policy environment for an increase in the production and offtake of Sustainable Aviation Fuel (SAF).

AN EU WIDE SAF BLEND MANDATE

- The AFF strongly recommends that a SAF blend mandate should be agreed and announced at least three years before implementation. This gives companies time to develop new production capacity and secure investments. Furthermore, a smooth transition between current SAF supporting policy mechanism and newly announced supporting mechanisms should be guaranteed. However, AFF raises the issue that a mandate for SAF production may displace limited resources from existing industrial operations such as used and waste lipids in the biodiesel industry. This could be detrimental to their continued economic operation and decarbonizing road transport. Therefore, attention is needed on how such a mandate will be implemented by the Members States which should provide adequate safeguarding for this existing industry.
- The EU wide SAF blend mandate should at least be in place for 10-15 years to generate an investible business case and to create confidence amongst investors to step in.

AN EU WIDE SAF BLEND MANDATE

- It is recommended that (financial) support is given, and will continue to be given, to SAF pathways which have not yet reached commercial scale. The Hydro processed Esters and Fatty Acids (HEFA) technology is currently the only pathway which is technically mature and commercialized. Therefore, it is likely that this technology will be used to produce SAF in the short to medium term. This will increase the pressure on the waste oil feedstock market and therefore two steps should be taken: 1) focus on diversifying the current limited feedstock portfolio of HEFA and 2) support the diverse range of other viable SAF technology pathways to reach commercialization. If more SAF pathways reach commercial scale, the feedstock portfolio will become more diversified. This diversification in technology pathways and feedstock possibilities is crucial in guaranteeing the sustainable scale-up of the industry. At the same time the industries using waste oils such as the biodiesel, should be safeguarded ensuring their continued contribution in decarbonizing road transport.
- A focus on building facilities which produce SAF as a significant part of their product slate (often these facilities produce a mix of outputs from LPG, gasoline, diesel and/or kerosene) to enable long-term, additional SAF volumes is preferred. The focus for the long-term should be on creating additional supply of renewable energy for the aviation sector.
- It is advised to spend some time and energy in deciding which would be the obligated party for the proposed mandate: the producers of SAF or the customers. A calculation can be done on the costs per obligated party and its consequences for the industry at large.
- It could be considered that for the short to medium term Recycled Carbon Fuels are needed to reduce the amount of carbon emitted by the aviation sector. These pathways often do not exceed the GHG reduction threshold which is currently set by the RED II. This insight could be useful in formulating the Delegated Act for Recycled Carbon Fuels.
- In order to ensure the functioning of an EU wide blend mandate, it might be considered to impose a cost of non-compliance which is higher than the cost of compliance. The cost of non-compliance should include the price differences per SAF technology pathway. This will guarantee the obligatory parties of the mandate to adhere to the offtake or production of the mandatory amount of SAF.

REVISION OF THE MULTIPLIER

The AFF does not support a multiplier as the sole policy mechanism to stimulate the production and offtake of SAF in Europe. It is recommended that the multiplier functions as an intermediate policy mechanism until an EU wide policy mechanism comes into place. But, for as long as the multiplier is in place, we ask the Commission to take the following elements into consideration:

- It would be helpful if the Commission releases an EU wide guidance on how to interpret and transpose the SAF supportive policies of the RED II into national legislation. An overarching approach should be adopted to prevent many approaches to the same question. For example, it would be useful if the Commission elaborates on how the multiplier can be combined with

REVISION OF THE MULTIPLIER

other measures (such as the double counted feedstocks in Annex IX) and which consequences these combinations might have.

- It is advised to elaborate on how the multiplier will have its effect in the different policy frameworks. For example, in some policy frameworks the multiplier has a stimulating economic effect (like in a bio ticket system) but, in some policy frameworks the multiplier will not have any effect (like in a blend-mandate system).
- If the multiplier comes into effect within a policy framework in which the multiplier creates economic value, it is advised that the multiplier for aviation includes- and matches with- the relative high costs for producing such a fuel. The multiplier should then be able function as a means to incentive the production of additional green molecules for the aviation sector.

A CENTRAL AUCTIONING MECHANISM

- With this auctioning mechanism, is the Commission referring to a Contract-For-Difference (CFD) system? If so, this policy measure could prove itself useful for the SAF sector. The SAF industry is new and the financial risks for potential investors are relatively high. With a CFD mechanism the investors are given the needed confidence to step in, the CFD system will strongly de-risks the investment. The likelihood for a project to fail under these circumstances is low.
- It is important that the SAF volumes can be traced from the points of origin up until the point where the fuel is delivered to the wing of a plane or its final destination (for example a hydrant system of an airport). These volumes, and its supply chain, should be transparent and widely available. It is recommended that time and energy is spent on building a reliant system which make these SAF flows visible.

FUNDING MECHANISM

- EU funding mechanisms are needed for two reasons: I) to financially support new SAF technology pathways with lower technology Technology-Readiness-Levels (TRLs). These technologies are 'in the valley of death' as they still have to reach certification (by ASTM for example) and have to pass the pilot and demo scale. Furthermore, II) to financially support SAF technology pathways which are already higher on the TRL scale (past pilot and demo scale) and which need to be commercialized. This last step often has to do with the big price gaps compared to fossil fuels, which these high TRL pathways must overcome. And III) to stimulate feedstock diversification solutions for all SAF pathways.
- Many European countries have feed-in tariffs in place for green electricity from PV installations of wind energy. The feed-in tariff mechanism could prove itself as a useful mechanism for SAF as well, based on actual supply. In this system producers (or buyers) get a set contribution to cover (a part of) the additional costs compared with fossil fuels. This support should be made available for a longer period of time and could (partially) come from national budgets as aviation fuels may count towards their renewable energy targets and support them in their energy transition from fossil to renewable.

FUNDING MECHANISM

- The 'State Aid rules for environmental protection and energy' need to be revised as the current Guidance only lasts until the end of 2020. It is important that the revised version of these State Aid rules allows governmental and/ or EU support for the development of the EU SAF industry next to a policy incentive (such as a blend mandate). Furthermore, these rules should not limit the amount of support given to these projects by the governments/ EU. This is currently the case (for example, no financial support can be given for biofuel facilities which exceed the production of 150.000 tonnes per year in case of an active policy incentive for biofuels in an EU Member State).

TECHNICAL FACILITATION AND SUPPORT INCENTIVES

We support this idea. It is indeed advised to (financially) support SAF technology pathways which are not yet approved for commercial aviation (ASTM, Defstan, etc.) by the EU and its Member States to reach certification. Preferably following a European Clearing House approach to reduce appliance failure and establish lower costs for certification.

THE SUSTAINABILITY APPROACH

The AFF proposes to have clear guidelines on the sustainability approach through which the sustainable growth and diversification of the technology base and feedstock portfolio of the SAF industry in the EU will be guaranteed:

- It is advised that feedstock development policies stimulate a diverse and truly sustainable feedstock portfolio for SAF. The focus should be on 1) diversifying the waste and residue portfolio to produce SAF and other transport fuels; 2) on agricultural-based feedstocks which have no negative impact on land use, nor on food- and feed security. These feedstocks can only be considered sustainable if these contribute to biodiversity, higher carbon sequestration, result in higher yields and a higher income for agricultural sector in Europe. These feedstocks could be used as an opportunity to deploy agricultural land which is no longer use or marginalized lands in the environmentally and economically challenging regions (within the EU); and 3) on developing additional renewable energy capacity for the production of green hydrogen (hydrogen is needed to produce SAF) and for the production of synthetic kerosene.
- It is valuable to allow these high-sustainability standards as the core model for the SAF industry and for the transport energy sector as a whole. These standards will enable the industry to look further than CO_2 savings alone and should prevent simple but unsound solutions for complex challenges. It is important to recognize that narrow definitions of allowed feedstocks, such as the Annex IX of RED II, fail to grasp the situational nature of sustainability, and only slows down the diversification of the feedstock portfolio. Therefore, we should build upon established comprehensive approaches to sustainability, including topics such as 'biodiversity' and 'fundamental rights'. These topics should be taken seriously and deserve a considerable amount of thought. Therefore, it is recommended to take a holistic social and environment approach, such as the '12 Sustainability Themes' of CORSIA and the 17 themes of the Sustainable Development Goals propose.

THE SUSTAINABILITY APPROACH

- The assessment states that: 'SAF can achieve as high as 80% GHG emissions savings compared to conventional jet fuel'. Depending on the SAF pathway, higher GHG reductions can be achieved (for example by using cover crops or certain waste and residues as feedstock for SAF).

ABOUT ART FUELS FORUM

The Alternative and Renewable Transportation (ART) Fuels Forum, financed by the European Commission, brings together more than 100 high-profile experts representing leading demand and supply Industries in the area of ART Fuels. It is a single policy and proven technology forum aiming at producing evidence-based opinions and conveying the collective interest of the ART Fuels industry towards informing European decision-makers and officials. The Forum supports the production and the utilization of sustainable advanced liquid and gaseous fuels towards decarbonization of key transport sectors: automotive, aviation and maritime and promotes the widespread market deployment of these fuels.

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