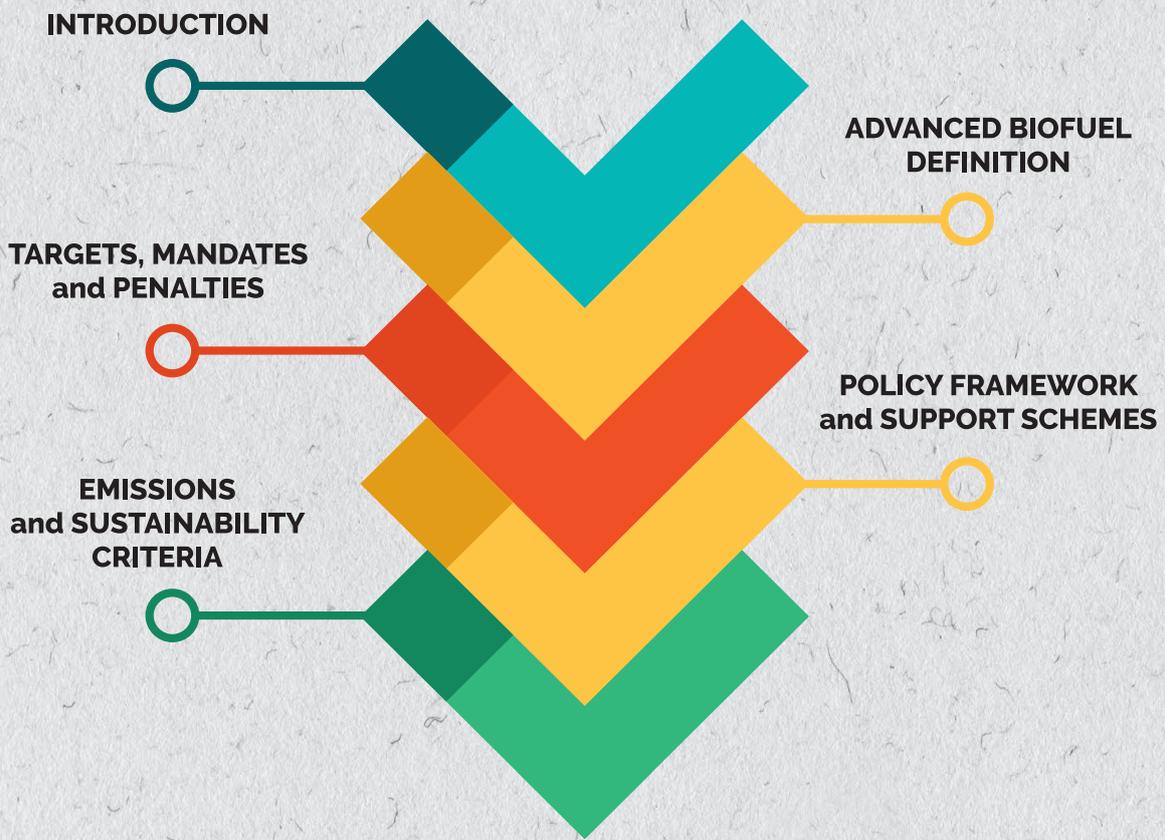




ART Fuels

KEY MESSAGES ON RED II PROPOSAL



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INTRODUCTION

The ART Fuels Forum is established under the project: "Support for alternative and renewable liquid and gaseous fuels forum (policy and market issues)", is financed by the European Commission and aims at bringing together high level, competent experts (ca. 100) representing:

- ♦ the European Alternative and Renewable Transport Fuels (ART Fuels) production industry
- ♦ the transport consumption industry
- ♦ the main international cooperation actors and
- ♦ the EU policy makers and stakeholders

towards facilitating discussion and elaboration of common issues **on policy and market penetration barriers** for these fuels.

The project contributes to enhancing and strengthening the understanding of the needs of the ART Fuels sector in view of improving:

- ♦ policy understanding and its implementation at European level
- ♦ appreciation of market uptake issues
- ♦ technology insight and deployment issues
- ♦ appreciation of international cooperation, World Trade Organization (WTO) and GHG emissions issues

The Forum integrates a series of organized and structured plenary meetings, preparation of position papers, etc. towards shaping strategies and policies for market deployment of ART Fuels, and it builds upon the results of the **Sub-Group on Advanced Biofuels (SGAB)** EU initiative. The SGAB report is supported and fully endorsed by the ART Fuel Forum (AFF).

Besides the general **Key Messages**, the Forum has also prepared **Sector-Specific Messages**, pertinent to the main focus of the considered ART Fuels production and transport consumption industries, as well as **Key Messages from the International Perspective**. These can be found at the project's website: <http://artfuelsforum.eu>

ADVANCED BIOFUEL DEFINITION

The **definition of advanced biofuels** should be broader than Annex IX lists and should include all sustainable waste & residue material based biofuels. Inclusion is key to successful policy and promotes and supports innovation. The Industry believes that a definition of advanced sustainable fuels should be developed and used with targets. We reiterate the SGAB definition of advanced biofuels as the most appropriate one for the recast of the RED: *"Advanced Biofuels are those produced from biomass other than food/feed crops while meeting the EU sustainability regime under the legislation in force"*.

The definition of 'non-food cellulosic material' as in Art. 2q is too narrow and doesn't represent reality on the ground. A more accurate one, reflecting the reality on sourcing sustainable biomass by the investors, is needed which is being drafted by the AFF and will be communicated soon.

Furthermore, **the SGAB definitions for Advanced Renewable Fuels, e-fuels and Low Carbon Fossil Fuels** should be adopted by the legislator to provide clarity and remove ambiguity in the legislation.

AFF finds difficult to **understand that 'Low Carbon Fossil Fuels' – non-renewable fuels - are integrated in the same sub-mandate with renewable fuels**. This Industry points out that this situation needs correction, and not the removal of the Low Carbon Fossil Fuels from the RED II as has been proposed.



The promotion of low carbon fossil fuels that are produced from gaseous streams thanks to **Carbon Capture and Utilisation (CCU) Technologies** can also contribute towards the policy objectives of energy diversification and transport decarbonisation. It is appropriate to include those fuels in the incorporation obligation on fuel suppliers under appropriate terms and dedicated legislative measures. Anyway, legislators need to ensure that they will not be confused **with Advanced Biofuels, Renewable Fuels or e-Fuels**.

The SGAB definition is universal and has been endorsed by the Industry: *“Low Carbon Fuels as: Low Carbon Fossil Fuels are liquid and gaseous fuels produced by the conversion of exhaust or waste streams of fossil fuel industrial applications via catalytic, chemical, biological or biochemical processes.”* The definition is clear and straightforward allowing the legislator to:

- ◆ Incorporate it in the fuel decarbonisation legislation.
- ◆ Safeguard that fossil-based fuels will not be considered as renewable fuels, but conditional to that such fuels fulfil a similar minimum GHG saving criteria as biofuels, estimated by a transparent methodology.
- ◆ Use a specific and dedicated mandate/target for their promotion without intermingling with renewable fuels.

TARGETS, MANDATES and PENALTIES



The **2030 targets of RED II are viewed as too conservative** and should be more ambitious to accelerate progress towards decarbonising transport and achieving the EU Paris obligations.

Furthermore, the Draft ITRE Committee Report of the European Parliament has deleted the specific target for Advanced Biofuels of at least 3.6% in 2030. Removal of a specific target will result in stagnation of investments in advanced biofuels and will leave the EU at a precarious position for years to come. The advanced biofuels sector needs a dedicated target to define the market for building-up a certain industrial level of production capacity, and thereby support further Research & Development in order to become cost-competitive.

Dedicated sub-mandates that progressively increase over time for advanced sustainable Alternative and Renewable Transport Fuels and separately for waste based (low-carbon) fuels, as those proposed by SGAB below, will increase investor confidence into the sector and increase market uptake of low carbon fuels. The Progressive scenario is in agreement with 2050 EU targets on transport decarbonization.

Contribution of Food/feed crop-land based Fuels to the 2030 target in % of total EU energy for transport			
Base scenario		Progressive scenario	
Food/feed crop-land based	6.0 ¹	Food/feed crop-land based	6.0 ¹

Contribution of Advanced Renewable Fuels to the 2030 target in % of total EU energy for transport			
Base scenario		Progressive scenario	
Advanced Biofuels:		Advanced Biofuels:	
- Lignocellulosic & other biofuels	3.0	- Lignocellulosic & other biofuels	4.5
- Lipid-based biofuels	3.0	- Lipid-based biofuels	4.5
e-fuels	0.5	e-fuels	0.7
Total	6.5	Total	9.7

¹ As defined in the amended RED directive (2009/28/EC) Article 3d, see ILUC directive (2015/1513/EU) Article 2(2)(d). These relate to the RED directive denominator of basically road transport, and hence the 7 % are reduced to 6% when changing the denominator to all energy used in transport, which is the basis for the SGAB 2030 targets.

Contribution of CCU / Low Carbon Fossil Fuels to the 2030 target in % of total EU energy for transport			
Base scenario		Progressive scenario	
Low Carbon Fossil Fuels (CCU)	0.7	Low Carbon Fossil Fuels (CCU)	1.0

Contribution of all Fuels to the 2030 target in % of total EU energy for transport			
Base scenario		Progressive scenario	
Total	13.2	Total	16.7

Setting a **specific target for advanced biofuels is welcomed**. However, a target is in itself not effective unless the implementation by the MS is accompanied by other measures, such as a **detering penalty for non-compliance of mandates**, that provides both risk-reduction for biofuel investors and a cap for the cost impact for the fuel consumers. To enable a stringent enforcement of the obligations, it is important to have a clear enforcement system in place (including strict penalty amounts and duration of enforcement/penalties).

POLICY FRAMEWORK and SUPPORT SCHEMES

Transition from **First Generation (1G) to Advanced Biofuels** should be orderly, permitting recovery of investment cost (grandfathering 1G in order to secure trust of investors and technology developers in this sector, and to facilitate 1G producers and involved fossil fuel oil majors to gradually swift to the production of Advanced Biofuels using existing infrastructure as much as possible). The proposed gradual phase out of all conventional biofuels starting as of 2020 and replacement by more advanced biofuels undermines trust in the EC's determination to honour past regulation and furthermore eliminates confidence of investors.

Furthermore, since the 10 % renewable transport fuel obligation for the MS is dropped as of 2021, and replaced by a lower EU common target in 2021, the market demand may take a drop in the transition from RED I to RED II, further alienating investors from the biofuel area.

The Industry strongly recommends that **crops based biofuels should not be reduced**. This is in line with the message advocated by the SGAB also.

The regulations for **co-processing in petroleum refineries to produce fossil/biofuel blends** at refinery output are not sufficiently clear and varies widely among the MS. Co-processing has both cost-reduction and high-volume potential and can therefore be important in short to medium-term to reach mandated biofuel targets. Co-processing provides a bridge between the established fossil fuel industry and emerging biofuels industry.

Specific incentives for Alternative and Renewable Fuels in transport sectors, such as aviation, are needed, in sectors dependant on liquid hydrocarbon fuels. Multiplier factors are not effective drivers to incentivize the use of any specific fuel, therefore must be avoided.

A **long-term stable policy framework** is needed and RED II does not sufficiently guarantee long-term stable policy framework, which is crucial to industrial and financial investors in all areas of biofuels. In particular, the overall review of RED II in 2025 is a cause of uncertainty. Our recommendation is: *"Introduce stable and predictable measures by a) locking the policy framework for a significant period of time, at least till 2030, b) by the grandfathering rule for any investment for a minimum 15 years and c) by using a functional well-to-wheel focus on GHG when evaluating and regulating ART fuels, thus increasing the confidence of stakeholders"*.

A proposal for a post-2030 extension of the mandates and targets should be presented in 2026 or investments may dry up after 2025. Nevertheless, for the sake of having a long-term stable framework, the proposed Directive should make clear that any investments made under the known conditions prior to the first official disclosure of the post-2030 framework will be safeguarded for a certain period, allowing e.g. 15 years of operation under any older and more favorable conditions.

RED II Directive should protect investments made to biofuels that:

- ◆ were part of National Sub-target of previous Directives (i.e. legislation in force up to 2020), and
- ◆ listed on Annex IX, section A or B, respectively, or
- ◆ determined to be waste, residues, non-food cellulosic material by the competent national authorities.

These biofuels should be defined as Advanced Biofuels or Biofuels and in the latter case not subject to a cap.

To be effective, the Directive must be accompanied by a combination of **measures mobilizing financial resources** (in different forms) to develop/introduce novel Advanced Biofuels technologies at industrial scale towards wider deployment in several installations and reach the targeted production capacity. RED II does not include any provisions on financing issues. This is a weakness.

Special attention should be paid to new technologies. Promising technologies that are not commercially available at scale and not yet competitive with existing low carbon fuel technologies or fossil fuels need additional attention so they can attract investment to for market deployment and contribute by 2030. The current proposed legislation foresees a review by 2025 and will be redesigned only after 2030. This time window is not supportive to new innovations. These innovative concepts and technologies need continuous and flexible support schemes to be able to scale up. From this point of view, RED II and in particular listing feedstocks in **ANNEX IX is not supporting innovation; on the contrary it undermines it.**

The internal market principle should also be adopted. Member States should fully recognize sustainable fuels that have been accepted in any Member State as meeting the renewable fuel criteria. At present, the biofuels area is the only one in the EU for which a Single Market doesn't exist as it has been shown by the SGAB work on this topic. This is detrimental to the advanced biofuels deployment and the Industry calls upon the European Commission to undertake all necessary measures to ameliorate this unacceptable situation. Strong commitment to Internal Market Principle (in order to achieve a significant production and processing capacity, economies of scale, minimum costs of compliance and maximum competitiveness) is needed.

Furthermore, the Directive should emphasize that **MS can set higher targets in the transport sector** by allowing the use of sustainable biofuels made from biomass and based on the SGAB definitions, in order to meet their own national 2030 Alternative & Renewable Transport Fuels mandates.

Dedicated measures for less developed EU countries have to be considered. Attention should be paid to the less developed economies of the EU to facilitate the uptake of these costly ART Fuel technologies on the market, taking into consideration issues related to rural development, employment, regional development, availability of resources, and circular economy.

EMISSIONS and SUSTAINABILITY CRITERIA

A amendment 81 on **indirect GHG-emissions from biomass** needs attention. The presented default values are based on weak data. The coupling with Amendment 38 regarding 70% GHG reduction for advanced biofuels will exclude significant biomass resources (including residues from forest management operations with the aim of improving the forest productivity, i.e. the carbon

sink capacity, such as thinning or removals to prevent forest fires) that are needed to achieve the EU targets for decarbonising transport. The continuously changing scientific modelling and resulting bureaucratic procedures and related costs of compliance were some of the reasons that removed any investor confidence in the EU resulting in stagnation of new advanced biofuels facilities. It also killed the implementation of the CDM in developing countries worldwide.

GHG emissions from waste have to be reassessed. GHG emission saving values assigned to bio-waste are underestimated and it is necessary to reassess them. In anaerobic digestion plants, the remaining biomass fraction after biogas production is an excellent organic fertilizer (digestate), which can replace mineral fertilizers thereby additionally saving CO₂ emissions and promote a circular economy and food production security by not utilizing imports of finite resources; on top, it increases soil quality being a natural sequester of organic carbon.

Finally, the **Sustainability Criteria should be clear and reasonable**, i.e. doable in time and with a limited amount of resources and cost, since otherwise they are a major barrier to competitive biofuels and also for the access of (innovative) SMEs in terms of Cost of Compliance. ❖



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DISCLAIMER - The "Key Messages of the ART Fuels Forum" have been drafted by the Management team of the Alternative & Renewable Transport Fuels Forum (ART Fuels Forum). The stakeholders who contributed to this work shared the aim of establishing a constructive and transparent exchange of views on the policy, technical, economic and environmental issues associated with the development and deployment of Alternative and Renewable Transport fuels. The objective was to evaluate the boundaries under which advanced biofuels can contribute to mitigating carbon emissions from transport. Each stakeholder contributed knowledge and vision of these issues. The information and conclusions in these Messages represent these contributions, but should not be treated as binding on the companies and organizations involved. The positions and recommendations listed above are those of the Members of the ART Fuels Forum and do not necessarily reflect the official position either of the Commission or of the Organizations represented by the ART Fuels Forum Members; nor they are recommended by the Commission or of the Organizations represented by the ART Fuels Forum Members.

