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TERMS OF REFERENCE (ToR) FOR A SUB-GROUP ON ADVANCED BIOFUELS TO BE ESTABLISHED UNDER THE SUSTAINABLE TRANSPORT FORUM (STF)

1. INTRODUCTION

These are terms of reference for a sub-group on Advanced Biofuels to be set-up under the Sustainable Transport Forum (STF).

1.1. Context and rationale

The Commission has been promoting actions towards a market up-take of alternative fuels. This is reflected in the Commission Communication "Clean Power for Transport: A European alternative fuels strategy"¹ and in the proposal for a Directive on the deployment of alternative fuels infrastructure², which became Directive 2014/94/EU³.

Biofuels are part of alternative fuels and at present they provide the bulk of alternative fuels used in the EU. Biofuels could technically substitute oil in all transport modes, with existing power train technologies and refuelling infrastructures. The production of biofuels, however, is limited by the availability of land, and sustainability considerations. The main advantages of liquid biofuels are their high energy density and the compatibility with existing vehicles and fuel distribution infrastructure, up to certain limits in concentration. Their use within the EU is governed by the Renewable Energy Directive⁴ (RED) and the Fuel Quality Directive⁵ (FQD). The RED embodies an overall target of reaching a 10% share of renewable fuels in the EU by 2020 while the FQD aims at reducing road transport emissions by 6% by 2020. The revision of RED⁶ placed a cap on

¹ COM(2013) 17 final of 24.1.2013

² COM(2013) 18 final of 24.1.2013

³ Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure, OJ L 307, 28.10.2014, p. 1

⁴ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

⁵ Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC

⁶ Directive 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources

crop based biofuels to 7% and an indicative target of 0.5% Advanced Biofuels by 2020 as well as reporting requirements of the Member States and the Commission on available financing and other means for support progress towards reaching this target at EU level as soon as possible (if technically and economically viable). In the aviation sector, the role of the ETS and of on-going ICAO's negotiations for Market-based Mechanism (MBM) favouring the use of biofuels should also be given due consideration.

Post 2020 it is envisaged that only Advanced Biofuels should receive public support⁷.

The Climate and Energy Framework⁸ imposes a new non-sectorial perspective with a target of a minimum of 27% share of renewables at EU level by 2030 without any sectorial breakdown.

Given the regulatory, technical, operational and economic challenges hampering the market take-up of Advanced Biofuels, it is envisaged that a dedicated sub-group established under the Sustainable Transport Forum (STF) will address those challenges in a systematic manner with the purpose to recommend potential avenues of how best to progress forward.

1.2. Mandate

The sub-group on Advanced Biofuels shall assist the STF in recommending appropriate strategies for advancing the implementation of the said Directive, notably through issuing recommendations aimed at facilitating the deployment and use of alternative fuels at EU level. The latter can, additionally, provide inputs for other relevant policies related to energy and climate change.

2. OBJECTIVES, TASKS, DELIVERABLES AND TIMETABLE

2.1. OBJECTIVES

Market failures and fragmented policies are currently preventing the uptake of alternative fuels, including advanced biofuels, in the EU transport system demonstrating the urgency to establish a coherent strategy leveraging industrial opportunities linked to advance biofuels. In this context, the key objective of the Sub Group on Advanced Biofuels will be to support the accomplishment of the policy objectives of the Clean Power for Transport Strategy, the 2030 Climate and Energy Framework and Energy Union Strategy.

In particular the Sub Group on Advanced Biofuels should recommend strategies on achieving the White Paper on Transport⁹ objective for low-carbon sustainable fuels in aviation of 40 % by 2050.

⁷ The Commission has indicated that food-based biofuels should not receive public support after 2020 and the State aid guidelines stress the need to focus investment support on advanced biofuels.

⁸ COM(2014) 15 final of 22.1.2014, A policy framework for climate and energy in the period from 2020 to 2030

⁹ COM(2011) 144 final of 28.3.2011, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

2.2. TASKS

The sub-group on Advanced Biofuels has a central role in carrying out tasks dedicated to identifying, assessing and recommending the STF comprehensive strategies and potential mitigating measures to handle the manifold set of technical, regulatory, economic and operational issues associated with the promotion and deployment of Advanced Biofuels for transport in the EU. The aim is to identify a balanced combination of policy (guidelines, standards, regulations, market based instruments, incentives), R&I and industrial strategies creating the framework conditions for such over-arching core objective to be attained.

a) The Sub Group on Advanced Biofuels should take into consideration the following set of elements:

- the measures and the timelines contained in Directive 2014/94/EU for the deployment of alternative fuels infrastructure;
- the findings and the recommendations issued by the former Expert Group on Future Transport Fuels and by the Sustainable Transport Forum;
- the results of the R&D projects, studies and works supported under the European Union budget;
- the relevant policies and related studies in areas of renewable energy, bioenergy and in particular biofuels;
- the reports of the European Biofuels Technology Platform relating to technology development and innovation and research strategies for advanced biofuels as well as those of the European Bioenergy Industrial Initiative;
- recommendations for technology development and R&I strategies, as well as guidance documents from the SET PLAN¹⁰

b) The main tasks for the sub-group on Advanced Biofuels are as follows:

1. To consider the main drivers and barriers underpinning the deployment of Advanced Biofuels. This relates, in particular, to the identification of opportunities for market penetration of biofuels as well as to market barriers throughout the whole value-chain – e.g. linked to infrastructure availability or the industrialisation of production facilities – that might hamper their broader take-up. It will analyse and recommend concrete measures mitigating organisational, operational cost related and other barriers limiting the deployment of Advanced Biofuels.

2. To maintain links and coordinate with other activities and initiatives in the area of Advanced Biofuels – both to prevent overlapping and to gather relevant information – including the relevant ESSF, the Biofuels FlightPath 2020 in Aviation, the European Biofuels Technology Platform, and CEN/CENELEC working groups, EU and national/regional feasibility, pilot projects, EU policy- and legislative initiatives, research projects under FP7 and Horizon 2020, ASTM-certification of aviation biofuels, etc. It will review the inputs of the before mentioned activities and initiatives regarding the

¹⁰ COM(2007) 723 final of 22.11.2007, A European Strategic Energy Technology Plan (SET-PLAN), 'Towards a low carbon future'

progress of on-going Advanced Biofuels projects/initiatives, analysing those elements that can be pivotal in providing guidance for the creation and assessment of effective local or regional business cases. Information on relevant initiatives, notably those pursued by the private sector, regarding alternative fuels at international, EU, and national level will play a key role.

3. To share good practices and lessons learned from other initiatives or sectors that might relate to advanced biofuel deployment and to exchange information on technology and market developments, on-going and planned Advanced Biofuels strategies, including national policy frameworks. Based on the inputs of the above mentioned activities and initiatives, it will identify the most promising pathways that are worth to pursue, set against their readiness level for deployment, prevailing industrial capacity, feedstock and distribution logistics.

4. To enhance the public awareness with regard to the use of alternative fuels. It will inform and exchange views about perceived risks and other public perception issues that might be detrimental to the take-up of Advanced Biofuels and consider actions to mitigate such drawbacks, notably focusing on the benefits of using Advanced Biofuels.

5. To synthesize this knowledge towards supporting Member States in the implementation of their national policy frameworks for alternative fuels, notably by establishing a coherent framework of data and information to be contained therein.

6. To devise a set of accompanying measures for inducing the market take-up of alternative fuels, taking into consideration market behaviour and the need for a sustainable, well-functioning market place. It will assess suitable financial engineering scenarios – involving notably EU, national and/or investment funds - that could be used to co-finance alternative fuels industrial production and infrastructure facilities

2.3. DELIVERABLES AND TIMETABLE

The sub-group shall report to the STF Plenary. A rapporteur shall be appointed and shall participate in all STF meetings, reporting about progress.

The sub-group is requested to produce a report, of maximum 50 pages plus Annexes, including a compilation of its findings, an analysis of the latter together with a set of relevant conclusions and recommendations. The report is to be made eventually publicly available. It is envisaged that the report should be ready by 30 June 2016.

Report Contents:

The core report shall include, as a minimum, the following main sections:

1. Implementation of Clean Power for Transport Strategy and Directive 2014/94/EU

D.1.1 Recommendations for a safe, effective and cost-efficient implementation of Directive 2014/94/EU. This could include specific guidelines, standards, or rules how to implement such recommendations. The latter could also be applicable in a wider EC policy context in the area of biofuels and bioenergy, such as the RED and FQD including in context of Energy Union Strategy implementation and 2030 Climate and Energy package.

2. Analysis of Drivers and Barriers underpinning the market take-up of advanced biofuels in transport

D.2.1 Identification of business opportunities for advanced biofuels

D.2.2 Recommendations on concrete mitigation actions addressing the identified barriers.

3. Business cases

D.3.1 Recommendations on potential routes for building-up business cases and creation a coherent and well –reasoned approach for their assessment.

D.3.2 Identification of existing or potential business cases for the deployment of Advanced Biofuels.

3. OPERATION OF THE EXPERT GROUP

3.1. Identification and selection of experts

The sub-group Advanced Biofuels shall include a blend of relevant expertise that is representative of the Advanced Biofuels value-chain - energy providers, vehicles manufacturers, research and innovation institutes, operators and users, service providers, technical standardisation organisations, regional and local authorities, and the civil society.

A list of suitable experts will be proposed by the Commission, selected on the basis of the following criteria:

- high level of expertise in at least one of the relevant fields indicated above;
- appropriate range of skills in the different fields covered by Directive 2014/94/EU, RED and FQD combined with an ability to perform strategic analysis on the Advanced Biofuels market and other ancillary issues – such as technology

Provided that the above two conditions are satisfied, other criteria will be also taken into consideration:

- appropriate balance between academic and industry expertise;
- a reasonable balance of geographical origins.

This list is to be eventually confirmed by the STF. Upon confirmation the experts will be formally appointed by the Commission

3.2. Working method

The sub-group will be chaired by a representative from the Commission. A vice-chair will also be elected amongst the sub-group members through a simple majority voting. The chair and the vice-chair will jointly act as Chairpersons for the sub-group.

The Chairpersons will decide on the sub-group's working methods; the latter are to be designed to ensure they are fit-for-purpose for delivering the mission requirements as described in these ToR whilst providing an optimal working environment for the sub-

group members and any other supporting expertise that might be mobilised in this context.

The sub-group will assign a rapporteur by simple majority.

Different Working Groups may be established to facilitate the operations of the sub-group. In such a case each working group should elect a Chair person and a rapporteur. The rapporteur will report to the Sub-Group.

The European Commission will provide appropriate administrative, secretariat, and technical support for the sub-group work.

All members of the sub-group are deemed to provide written contributions in their areas of expertise, according with guidelines that are to be discussed by the sub-group. Such written contributions will be coordinated by the sub-group's (or Working Group) rapporteur. The latter will be also responsible to prepare the draft documents for discussion and all the relevant reports and documents to be released by the sub-group. The Commission's staff working with the sub-group and the Working Groups will support the rapporteur in these tasks.

This sub-group shall cooperate with and provide input to other relevant sub-groups established under the STF.

3.3. Meetings

The meetings of the sub-group shall be held in Commission premises. The sub-group shall meet at least four times per year. The meetings will be open to Commission officials with an interest in the proceedings.

The Chairpersons of the sub-group and the rapporteur will be in regular contact with the members of the sub-group to ensure smooth running of the sub-group and progress towards the fulfilment of its mission. Ad-hoc external experts may attend the meetings to provide expert input on specific issues.

3.4. Duration

The expected lifetime of this sub-group on Advanced Biofuels is one year from the date of its appointment. If deemed necessary by the Commission this period may be extended with a view to allow for fulfilment of the mission defined in these ToR.

4. Boundary conditions

The work of the sub-group on Advanced Biofuels shall take into account the existing legislation and shall focus its work with due regard to the following caveats:

- Discussion on competition of biomass for biofuels with biochemicals, biomaterials and the concept of "cascading use of biomass" is out of scope of these ToR.
- It is highly unlikely that direct fiscal subsidies by Member States on biofuels will be approved by the Council and thus recommendations on such measures are out of scope of these ToR.

- It is highly unlikely that fixed mandates to Member States on biofuels will be approved by the Council and thus recommendations on such measures are out of scope of these ToR.
- Crop based biofuels are expected to be limited to 7% also post 2020.
- Issues related to sustainability and ILUC are specified in existing legislation and therefore any further discussion is out of scope of these ToR.