SUSTAINABLE FUELS

IMPROVING THE RENEWABLE ENERGY DIRECTIVE

October 2021

Sustainable Fuels, which represents European producers of cleaner fuels, supports the objectives of the European Green Deal and the proposal for a revision of the Renewable Energy Directive (RED) in the context of the *Fit for 55* package. Sustainable Fuels believes that an updated RED can strengthen the policy framework for advanced biofuels, while supporting a transition towards decarbonised transport. A ready supply of reliable, affordable, and clean energy will be fundamental to Europe's decarbonisation objectives. For the EU to reach its 2030 and 2050 climate ambitions in a rapid and cost-effective way, it must also encourage a variety of lower carbon fuels.

Recognizing the value of 100% bio-ethers

Sustainable Fuels is committed to foster the production of advanced biofuels. Technological developments now allow to produce **100 % bio-based fuel ethers** (bio-MTBE, bio-ETBE, bio-TAME and bio-TAEE) which are among the most efficient blending components of petrol and provide more sustainable and efficient solutions for the transport sector.

The new RED should recognize that **bio-based fuel ethers** – made of both bio-alcohol and bio-olefin **– are considered 100% renewable** when accounting for renewable energy consumption. A 100% default value will also allow for a uniform transposition of this specific provision into national legislation, rectifying the current asymmetric situation across EU Member States.

A life cycle look at low carbon fuels

Decarbonising the transport sector will need fuels with a substantially lower carbon emission intensity than those currently on the market. Provisions in the new RED should create opportunities for those new and cleaner fuels and encourage technological innovation.

Calculating and accounting greenhouse gas savings should encompass the full life cycle of new fuels. Our industry is ready to contribute assessing the life cycle impact of our portfolio of products, demonstrating the in the most transparent way their role in making road transport more sustainable.

Sustainable Fuels welcomes the current approach to reduction **targets based on the carbon intensity of fuels,** calculated with a robust LCA methodology. New targets should be as streamlined as possible so that more efficient fuels and their blending components can contribute to overall emission reductions.

Sustainable Fuels also supports **limiting the use of multipliers** as foreseen by the current proposal**.** Multipliers are not a refined instrument and they have been applied unnecessarily to technologies already mature such as renewable electricity.

Recommended amendments to the European Commission proposal COM (2021) 557

A. Annex I point (3) – New Annex III of the Renewable Energy Directive to reflect the actual renewable energy content of bio-fuel ethers. Clarify that **100% of the energy content (by volume and by weight) is counted as renewable when a bio-ether is produced from both bio-alcohol and a bio-olefin,** as follows**:**

Fuel	Energy content by weight	Energy content by volume
	(lower calorific value, MJ/kg)	(lower calorific value, MJ/l)
ETBE (ethyl-tert-butyl-ether produced on the basis of ethanol)	36 (of which 37 % from renewable sources, **or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)	27 (of which 37 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)
MTBE (methyl-tert-butyl-ether produced on the basis of methanol)	35 (of which 22 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)	26 (of which 22 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)
TAEE (tert-amyl-ethyl-ether produced on the basis of ethanol)	38 (of which 29 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)	29 (of which 29 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)
TAME (tert-amyl-methyl-ether produced on the basis of methanol)	36 (of which 18 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)	28 (of which 18 % from renewable sources**, or 100 % if the bio-ether is produced from both a bio-alcohol and a bio-olefin**)

Justification: Fuel ethers are an essential component of petrol which bring efficiency and reduces emissions. In recent years, technological developments have led to the development of 100 % bio-based fuel ethers. The changes to Annex III are meant to reflect the now-established sustainable production of fuel ethers

B. Recital (30) - "Electromobility will play an essential role in decarbonising the transport sector. To foster the further development of electromobility, Member States should establish a credit mechanism enabling operators of charging points accessible to the public to contribute, by supplying renewable electricity, towards the fulfilment of the obligation set up by Member States on fuel suppliers. While supporting electricity in transport through such a mechanism, it is important that Member States continue setting a high level of ambition for the decarbonisation of their liquid fuel mix in transport. ***High octane petrol (HOP), obtained with sustainable components such as fuel ethers and bioethanol, contributes to reducing emissions and increasing combustion efficiency and should therefore be part of the fuel mix during the transition to decarbonised transport."***

Justification: Fuel components such as fuel ethers improve fuel consumption, improve air quality, and reduce the emissions of exhaust pollutants such as volatile organic compounds

and particulate matter. They also reduce the need for energy intensive fuel components, further reducing overall CO2 emissions.

Sustainable Fuels is dedicated to the responsible production, usage and promotion of clean, high quality, high-efficiency petrol components.

Sustainable Fuels bring together eight producers of MTBE | BIO-MTBE | BIO-ETBE | TAME | BIO-TAME | BIO-TAEE which represent most of the EU ether production capacity

Fuel ethers are key components for the production of high-octane fuels. They increase petrol's performance, while reducing the emissions of air pollutants and CO2. They are a clean and efficient replacement for other compounds, such as toxic lead, that pose a proven risk to health and the environment.

Sustainable Fuels supports and disseminates state-of-the art scientific research on the benefits and impact of fuel ethers on vehicle performance, health and the environment and advocates for science-based policymaking, through active cooperation with all stakeholders: regulators, legislators, industry, NGOs and the academic community. Sustainable Fuels also supports global activities to improve communication on the efficiency and cost effectiveness of transport.