

## POSITION PAPER

### eFUEL ALLIANCE CALLS FOR AN AMBITIOUS REVIEW OF RED II AS PART OF A COMPREHENSIVE AND MORE COORDINATED EU CLIMATE POLICY

#### GENERAL REMARKS

The eFuel Alliance clearly supports the European Commission's target for climate-neutrality by 2050. To achieve this goal and limit the global temperature increase to below 2° Celsius, all sectors must significantly intensify their efforts to reduce greenhouse gas (GHG) emissions. The transport sector, and in particular road transport, must play a key role in this as it accounts for one fifth of GHG emissions in the EU, and thus holds great reduction potential.

As one of the key legislative measures to support the Union's increased climate ambitions, the review of the Renewable Energy Directive (REDII) should be used to promote a level-playing field for all relevant emission reduction solutions. Only a multi-solution approach combining different technologies will decisively accelerate the defossilisation of our economy. A stronger consideration of the role of sustainable fuels, and eFuels in particular, is vital here. That is because their huge contribution to GHG emission reduction, their potential global production and their indispensability for many sectors is not sufficiently taken into account in the current REDII.

By replacing fossil fuels, the deployment of eFuels could contribute to a significant reduction of CO<sub>2</sub> emissions – initially by being blended with conventional fuels (drop-in capability), ultimately as a substitute for them. This can provide a climate-neutral solution for several sectors: eFuels are suitable for all means of transport powered by an internal combustion engine (ICE), and can serve as a climate-neutral option in cases where the market ramp-up of electromobility might face challenges (e.g. infrastructural issues, electricity price increase, customer acceptance). They can also be used as feedstock for the industrial chemical sector and represent a climate-neutral alternative to conventional heating oil. With increased quantities of eFuels being added gradually and production costs falling due to economies of scale, eFuels would be affordable for consumers in every phase and also for hard-to-abate sectors like aviation and shipping.

#### TOWARDS A CLEAN AND SUSTAINABLE MOBILITY TRANSITION

In order to make its necessary contribution to achieving EU climate targets, mobility must transition as quickly as possible from fossil fuels to sustainable energy carriers and solutions offering significant GHG reduction. In the transport sector, which is one of the largest contributors to GHG emissions and still highly dependent on fossil fuels, rapid CO<sub>2</sub> reduction will only be possible through a combination of several emission-reduction pathways, so that different technologies can complement each other. Effective climate protection is best promoted by establishing a level-playing field among wide-ranging emission-reduction options and keeping

abatement costs as low as possible. Therefore, what is needed is a mix of renewable electricity for e-mobility, advanced biofuels, eFuels, fuel cells and potentially other climate-protection technologies.

A stronger consideration of the role of renewable fuels in road transport would also allow the existing fleet to be better integrated into climate protection efforts. This is essential since vehicles with an ICE will continue to dominate the vehicle fleet for many years to come. The revision of REDII therefore provides a crucial opportunity to review and re-evaluate the emission reduction potential of renewable and low carbon fuels in general, and to recognise the options opened up by clean synthetic fuels and hydrogen in particular.

## TOWARDS A CLEAN AND SUSTAINABLE BUILDING AND HEATING SECTOR

Given that around 20 million heating systems in the EU run on conventional liquid fuels, eFuels can also contribute to significant CO<sub>2</sub> reductions in the building sector and in domestic heating. As with their deployment in ICEs, eFuels are also compatible with existing modern oil condensing boilers.

One of the main benefits of a stronger promotion of eFuels in the heating and building sector would be that lower-income households would be spared high conversion and renovation costs. Households can thus continue to use their heating systems, and at the same time make a contribution to climate protection. With increased quantities of eFuels being added gradually to conventional fossil-based heating oil, and production costs falling due to economies of scale as mentioned earlier, eFuels would be affordable for consumers even from the very beginning of this process. Renewable synthetic fuels are therefore a cost-effective and economic CO<sub>2</sub> reduction option that can increase consumer acceptance of the clean energy transition.

The emission reduction potential that renewable synthetic fuels, eFuels, can offer in the heating market should therefore be given greater consideration in the review of REDII.

## A MORE AMBITIOUS RENEWABLE ENERGY DIRECTIVE

For more than ten years, the share of renewable fuels in transport has stagnated at a consistently low level, even in 2018 making up only 5.2% in total fuel supply in the European fuel market.<sup>1</sup> That has left the share of renewable energies in transport significantly lower than in other sectors. This is partly due to the lack of incentives for necessary investments in the market ramp-up and deployment of renewable fuels – which in turn is a consequence of unambitious RED targets and a fragmented policy landscape.

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<sup>1</sup> COM(2020) 742 final – Report from the Commission to the European Parliament and the Council: Quality of petrol and diesel fuel used for road transport in the European Union (Reporting year 2018), p. 3  
[https://ec.europa.eu/clima/sites/clima/files/news/docs/com\\_2020\\_742\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/news/docs/com_2020_742_en.pdf)

In addition, neither does the current REDII take into account the fact that the CO<sub>2</sub>-reduction contribution of different renewable energy sources in transport, and in the heating sector, has changed significantly over recent decades. Nor does it recognise that new defossilisation alternatives, such as renewable synthetic fuels, eFuels, have emerged.

In order to boost the deployment of renewable and low carbon fuels, especially in transport, we consider the following policy requirements essential in the revision of REDII:

### **1. Setting more ambitious 2030 RED targets**

As part of a consistent EU climate strategy, the share of renewable energies in road transport should be increased to >24% by 2030 (detached from possible multipliers and charging capacity), while taking into account the specific CO<sub>2</sub>-reduction potential of the respective energy carrier in order to realise a level-playing field for all emission reduction technologies.

### **2. Setting specific sub-target for renewable fuels of non-biological origin (RFNBOs)**

In order to spark necessary investments and support their market ramp-up, renewable fuels of non-biological origin (RFNBOs), such as eFuels and hydrogen, should be given extra support by setting one separate, ambitious sub-target for RFNBOs in all transport modes. We recommend at least a sub-target of 5% hydrogen and eFuels for all transport sectors in Europe by 2030. A sub-target would generate a corresponding demand and allow direct investment decisions.

According to the European Commission's impact assessment on the European climate strategy in 2030, the fuel demand in Europe (including aviation and maritime navigation) is expected to be about 330 Mtoe. A 5% sub-target would result in 16.5 Mtoe or 192 TWh of hydrogen and eFuels. Assuming an average operation time of 5,000 full load hours per year and an overall efficiency of 60%, the energy demand for the required installed electrolyser capacity corresponds to around 64 GW. This would equate to about 80% of the capacity announced in the European Hydrogen Strategy (2x40GW). Therefore, the inclusion of a 5% sub-target in the revision of the REDII could not only lead to a saving of up to 60 million tonnes of CO<sub>2</sub> in road transport if 5% eFuels are blended with conventional fuels, but also contribute to a successful realisation of the hydrogen strategy.

### **3. Creating a coherent certification and verification system covering all energy carriers**

The certification and verification system should not generally be limited to renewable and low-carbon fuels, but should be applied across sectors. Accordingly, in order to ensure a sufficient supply of renewable electricity and to prevent unwarranted preferential treatment for one particular technology, requirements outlined in Article 27 of REDII and relating to the power supply for new technologies should apply to all market participants. Furthermore, a swift introduction of the certification and verification system is urgently needed as uncertainty about this system is currently hampering all hydrogen projects in the EU. Moreover, a better and more pragmatic approach would be one that encourages "first-movers" by increasing the requirements and the

level of ambition gradually. However, for planning and investment security, the framework conditions should apply for the entire term of the individual project. We therefore urge the Commission to publish the relevant pending delegated acts (deriving from Articles 27 and 28) at the latest by the time of the presentation of the REDII review as envisaged in June 2021.

#### **4. Swiftly establishing a Union database for renewable fuels**

The creation of a European database for renewable fuels, as mentioned in Recital 84 of REDII, would greatly simplify and streamline the processes for certification and monitoring of the sustainability criteria deriving from Articles 27 and 28. It would also help to avoid double counting in relation to other legislation. We therefore urge the European Commission to push for its introduction as soon as possible.

#### **5. Rethinking the application of multipliers**

We are critical of the way REDII permits multiplication factors for certain energy carriers to achieve targets in the transport sector. We understand that by applying multipliers, incentives for the roll-out of certain technologies or applications can be created to support their market ramp-up. However, the application of multipliers slows down the actual provision of renewable energies and therefore does not lead to any real emission reduction. Moreover, multiplying the share of electricity provided for electric road vehicles constitutes unwarranted preferential treatment for one particular technology only. The multiplication factors should therefore be amended to simplify the legislation and to increase the level of ambition. At the very least, there needs to be a level-playing-field regarding the possibility of applying multipliers for all energy carriers with a focus on real CO<sub>2</sub> emission reduction. Mainly promoting one technology by applying multipliers in a disproportional way will not lead to the best results in reducing the overall GHG emissions.

#### **6. Avoiding fragmentation and creating a European market for renewable energies**

While we acknowledge the different national realities across the European Union, the flexibility granted to Member States to shape the supply of renewable and low-carbon fuels should be finely balanced in order to ensure the integrity of the single market and avoid fragmentation. Road transport operates across borders within the Union and therefore needs to be able to rely on the availability of renewable and low-carbon fuels to ensure access and provision of mobility. This requires more uniform implementation in the Member States.

#### **7. Promoting the production of clean hydrogen and hydrogen-derived products in the EU and worldwide**

To meet the expected demand for hydrogen and eFuels, their production should be promoted. If all sustainability criteria are met, hydrogen and eFuels projects from regions where renewable energy can be produced very efficiently should be eligible for funding – inside and outside the EU. As eFuels are easily transportable, they can make a significant contribution to the Union's clean energy transition and accelerate the process of defossilisation.

In addition, new energy partnerships, especially those with African countries, can also represent a win-win situation for both sides, by creating new market opportunities through the export of the required European Power-to-X technologies, and by helping countries beyond the European Union to become climate friendly fuel exporters, and aiding their clean energy transition. A recent study related to Morocco has shown that 1 Euro invested in eFuel technology leads to 12.45 Euro in social return on investment – meaning that on-site investments can generate additional economic value to a factor of 12 for the country concerned.<sup>2</sup>

## **A MORE COMPREHENSIVE AND COORDINATED EU CLIMATE PROTECTION POLICY**

The policies defined in the revision of REDII need to be complemented by the comprehensive coordination of all relevant climate policy legislation to accelerate the defossilisation of our economy and ensure the success of European Climate Protection strategy.

In order to pursue a more holistic approach to climate protection, we therefore consider a stronger linkage with the following legislation essential:

### **1. Implementing a voluntary crediting system for renewable fuels in EU emission standards for road transport**

While the Renewable Energy Directive regulates the supply side for renewables, market-based instruments such as counting renewable fuels towards EU CO<sub>2</sub> fleet targets should complement emission-reduction efforts on the demand side. This would also guarantee that the fuels produced are as highly attuned as possible to the specifications of motor engines, linking the fuel and automotive sectors in their common drive to improve technological developments. Given that automotive manufacturing constitutes a target market for renewable fuels, including eFuels, with high demand and high willingness to pay, a voluntary crediting system for additional renewable fuels in the EU emission standards could lead to a more efficient coordination of abatement cost/efforts, while maintaining affordable individual mobility.

### **2. Revising the Energy Taxation Directive**

Another measure to support the uptake of Renewable Energy Sources is to consider the positive contribution of renewable fuels to climate protection in energy taxation. If the energy tax is levied on an environmentally relevant tax base, this promotes the use of sustainable, clean fuels instead of conventional fossil fuels and thus supports their market ramp-up. Under the current Energy Taxation Directive, fossil and renewable fuels are treated equally – a clear contradiction of climate ambitions.

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<sup>2</sup> Preissler, A. M. (2020): Renewable Energy Carrier Generation in Developing Countries – Analyzing the Social Impact of Power-to-X Gigaplants in Morocco, p. 57

### 3. Aligning the Fuel Quality Directive with REDII and Europe's 2030 climate targets

The Renewable Energy Directive and the Fuel Quality Directive (FQD) both address the same issue: more climate protection in the transport sector. REDII focuses on energy related targets for specific fuels while the FQD sets GHG emission reduction targets for renewable fuels in comparison to fossil fuels. It would make sense to align both pieces of legislation as was done in the German implementation of both directives. However, a focus on the carbon content of the energy carriers is a more technology neutral and effective approach than one that relates to individual energy related targets. We would therefore recommend an alignment of both regulations with a particular focus on GHG reduction potential (article 7a of the FQD).

### ABOUT THE eFUEL ALLIANCE

The eFuel Alliance is a stakeholder initiative committed to promoting the political and social acceptance of eFuels and to securing their regulatory approval. We represent more than 110 companies along the value chain of eFuel production. We stand for fair competition and a level-playing field for all relevant emission reduction solutions. We are clearly committed to more climate protection and aim to win broader recognition of the significant contribution eFuels can make in the drive for sustainability and climate protection. Our goal is to facilitate the industrial production and widespread use of carbon neutral fuels made from renewable energy sources.