

## CO<sub>2</sub> Emission Performance Standards for New Passenger Cars and for New Light Commercial Vehicles

### UNITI Position Paper

#### Key Messages

- Road transport is currently heavily relying on the use of liquid fuels and this will remain so in the short and medium term. This is why liquid fuel innovations are one of the quickest way to reduce CO<sub>2</sub> emissions.
- Emission-targets should therefore recognise the positive contribution that alternative fuels such as E-Fuels can make to reduce CO<sub>2</sub> emissions.
- E-Fuels can be blended with conventional fuels or replace them entirely. That is why they are the best option when it comes to reducing CO<sub>2</sub> emissions of the existing vehicle fleet.
- A clear legislative framework which supports investments into alternative fuels is needed in order to boost the production capacities of E-Fuels.
- The model for the recognition of alternative fuels which is currently being discussed in Switzerland could serve as an inspiration for a European model.

#### I) Vehicle fleet offers biggest potential for CO<sub>2</sub> reductions

In order to reduce the environmental impact of the transport sector and to achieve the Paris Climate goals, a comprehensive approach that values the contributions of different technologies is needed. The concept of technology neutrality is important since it guarantees that CO<sub>2</sub> reductions can be achieved in a cost effective way.

In order to effectively decarbonise road transport in the short and medium term, it is essential to **focus on the existing vehicle fleet**. Today, the overwhelming majority of passenger cars and commercial vehicles on the roads use liquid fuels. In Germany 99,36% of all cars, buses and commercial vehicles use petrol, diesel or LPG.

As the consumer uptake of electric cars is slow, the existing vehicle fleet will remain heavily dependent on liquid fuels for a long time. In addition, there are no alternatives to liquid fuels for key transport sectors (e.g. international heavy goods transport) or vehicle models (vehicles used in construction, agriculture, forestry etc).

This is why alternative fuels such as **E-Fuels are a key measure when it comes to tackling CO<sub>2</sub> emissions of the existing vehicle stock**. Therefore, the potential of E-Fuels should also be recognised in the Regulation on CO<sub>2</sub> emission standards for passenger cars and light commercial vehicles.

## II) E-Fuels effectively reduce CO<sub>2</sub> emissions

E-Fuels are synthetic fuels that **are CO<sub>2</sub>-neutral in their production and use**. Only water, carbon-dioxide (such as from the atmosphere) and energy from renewable sources (e.g. wind, solar) are needed to produce E-Fuels. Synthetic fuels can therefore contribute significantly to reaching the climate goals of the transport and building sector. E-Fuels have many advantages: they are easy to store, have a high energy density and are thus able to solve the storage problem of energy from renewable sources.

While many technologies only target emissions from new vehicles, **E-Fuels can be employed in all combustion engines** and can thus help reduce the emissions caused by the existing vehicle fleet. Keeping in mind that vehicles have an average life span of 18 years and that only around 1% of new cars do not use a combustion engine, E-Fuels can reduce CO<sub>2</sub> emissions much faster than a shift to electric cars.

E-Fuels have significant **benefits for consumers**: Vehicle owners do not have to invest into new technologies; they can continue to drive their vehicle while reducing their CO<sub>2</sub> emissions. In addition, E-Fuels have all the advantages of conventional liquid fuels which make them user-friendly and convenient: short fill-up time, high vehicle range and the familiar filling process.

E-Fuels can be blended with fossil fuels without any problems (drop-in capability from 1–100%). As there is already a **broad distribution network** for liquid fuels, E-Fuels could be rapidly introduced to the market.

A recent study on E-Fuels published by the German Energy Agency dena found that “even in a battery electric drive dominated scenario, the final energy demand of all transport modes in the EU will be met with more than 70% of e-fuels in 2050. The majority of these e-fuels will be used for aviation, shipping and freight transport.”<sup>1</sup>

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<sup>1</sup> dena and Ludwig-Bölkow-Systemtechnik GmbH LBST: E-Fuels Study. The potential of electricity-based fuels for low-emission transport in the EU. November 2017.

### III) Models for the recognition of alternative fuels

The Commission proposal on CO<sub>2</sub> emission standards for passenger cars and light commercial vehicles unfortunately does not contain any incentives for the use of alternative fuels such as E-Fuels. However, a **clear legislative framework which supports investments into new and innovative fuels** is needed in order to boost the production capacities of E-Fuels.

While the current EU emission trading system is based on pollution rights, one should also consider complementing the ETS system by so-called “GHG reduction certificates”. A **trading system for alternative fuels** based on an open approach and covering a variety of sectors would **boost investments into new and sustainable technologies such as E-Fuels**. A similar system is currently being discussed in Switzerland.

The system could be designed as follows: A public body would be in charge of registering how many “reduction certificates” a company has acquired through introducing alternative fuels to the market. The company would then be able to deduct this amount from their CO<sub>2</sub> targets.

By enabling trade with CO<sub>2</sub> “reduction certificates” a market for alternative fuels such as E-Fuels could be created. This in turn would encourage investments into production facilities.

We would be glad to discuss this matter further.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Elmar Kühn'.

Elmar Kühn  
Managing Director



**About UNITI:**

UNITI Bundesverband mittelständischer Mineralölunternehmen e. V. was established in 1927. It combines competencies in fuels, the heating market and lubricants, and represents around 90 percent of the small and medium-sized enterprises in the mineral oil industry in Germany. Around 4.5 million people use the fuel stations of UNITI member companies every day. The association members operate 120 federal motorway fuel stations and around 5,900 road fuel stations, thereby covering approximately 40 percent of the road fuel station market. UNITI also encompasses around 3,600 independent fuel stations, representing roughly 70 percent of independent fuel stations. UNITI members supply around 20 million customers with heating oil, one of the most important energy sources in the heating market. Around 80 percent of the total market for light heating oil and solid fuels is serviced by association members. Meanwhile, their product range also includes renewable energy sources as well as gas and electricity. The share of UNITI members in the liquid petroleum market equals around 42 percent. Most independent, small and medium-sized lubricant manufacturers and traders in Germany are also affiliated with the association. Their market share amounts to around 50 percent. The approximately 1,300 member companies of UNITI generate a total annual turnover of around 35 billion euros and employ around 78,000 people in Germany.