

Position

RED III

Implementation of the Renewable Energy Directive
into national law



Political demands

- I. Renewable fuels are crucial to achieving climate targets in the transport sector. Only by means of these fuels the vehicle fleet can contribute to defossilization.**
- II.** In order to achieve the climate protection targets in the transport sector, a real GHG reduction of 30% must be achieved by 2030. Taking multiple counting into account, the law must stipulate a GHG reduction of 35%.
- III.** The combined sub-quota for advanced biofuels and RFNBO¹ should be separated and both fuels should be given their own minimum targets and each should be significantly increased. In particular, a compliance quota for RFNBO should be set particularly ambitiously in order to encourage the necessary investments through long-term binding commitments. The VDA is in favor of an RFNBO sub-quota of at least 5%.
- IV.** In order to close the gap between virtual and real climate protection, multiple counting should be reviewed as part of the RED review (2027) and ideally phased out in stages by 2030 - but not for hydrogen.

In order to ensure investment security for hydrogen production plants and thus to establish a commercial market for green hydrogen, the multiple crediting for hydrogen must apply for a longer period and, depending on the market ramp-up, can be phased out in stages by the end of the 2030s.

- V.** In order to create investment and planning security for the provision of energy sources in road transport, a regulatory framework beyond 2030 - as for shipping and air traffic - must be adopted now.
- VI.** The ramp-up of renewable fuels as a contribution to GHG reduction in the transport sector must be supported by regulations. Possible options include regulatory policy, tax policy or tendering models.

¹ Synthetic fuels such as hydrogen and e-fuels are defined in RED III as "Renewable Fuels Of Non-Biological Origin (RFNBO)."

Introduction

The German automotive industry is committed to the goal of climate neutrality by 2045. To this end, it is investing €280bn worldwide in research and development between 2024 and 2028 - and thus also in climate protection. The VDA is fundamentally in favor of a technology-open approach to the defossilization of road traffic.

The revised Renewable Energy Directive (RED III), which came into force on November 20, 2023, addresses the ramp-up of renewable fuels². This not only allows the existing stock of vehicles with combustion engines to be operated in a largely climate-neutral manner in the future, but also enables the market ramp-up of zero-emission vehicles such as fuel cell trucks. At the same time, the EU Commission has been tasked with developing a concrete and technically feasible framework so that so-called „carbon neutral fuels“ (CNF) vehicles can be legally approved even after 2035. One thing is clear: Germany will continue to be an energy importing country. According to RED III, this energy should be completely renewable by 2050 and thus no longer of fossil origin (recitals 1, 6, 22 and 25 RED III). Germany has already set itself this goal for 2045.

RED III sets a clear climate target for the transport sector for Member States. They have the option of choosing between an energy quota of 29% and a GHG quota of 14.5% by 2030. RED III must be implemented into national law by 21 May 2025. While there is an upper limit for conventional and waste-based biofuels, lower limits have been set for advanced biofuels³ and RFNBO⁴. Member States therefore have the option of enabling additional climate protection through more ambitious targets as part of national implementation, for example to close any climate gaps in the transport sector.

In RED III, the climate target includes, for the first time, binding requirements for the entire transport sector, consisting of road, rail, air and shipping, with road traffic accounting for the largest share at 71% of emissions⁵. The requirements for the transport sector of the currently still valid RED II are implemented in Germany via the greenhouse gas reduction quota (GHG quota) in Section 37a of the Federal Immission Control Act (BImSchG). The national GHG quota will rise to 25% by 2030, and both charging electricity and renewable fuels can be counted.

The ramp-up of electromobility and in particular hydrogen vehicles in the commercial vehicle sector and the associated demand for renewable charging current and hydrogen will enable significant CO₂ savings in the coming years within the framework of the GHG quota and contribute to meeting the RED III targets. However, this is not enough, as there will still be vehicles with combustion engines in Germany for a long time to come.

² „Renewable fuels“ in the sense of the possible compliance options according to Art. 27 RED III are: conventional biofuels, advanced biofuels and RFNBO (hydrogen, e-fuels). The VDA considers the fuels mentioned to be renewable if they have a greenhouse gas saving of at least 70% in the sense of Art. 29a Para. 1 RED III. In addition, the VDA is in favor of no further definitions being anchored in other regulations in addition to the definition of renewable fuels in Art. 29a Para. 1 RED III, since the RED is the central document for the ramp-up of renewable energy sources.

³ This position defines advanced biofuels within the meaning of Article 2 Paragraph 2 No. 34 RED II; identically valid in RED III („Advanced biofuels are biofuels produced from raw materials listed in Annex IX Part A“).

⁴ The VDA defines electricity-based fuels as RFNBO within the meaning of Article 2, Paragraph 2, No. 36 RED III („Renewable fuels of non-biogenic origin are liquid or gaseous fuels whose energy content comes from renewable energy sources with the exception of biomass“).

⁵ Infographic - „Fit for 55“: for more sustainable transport: „Fit for 55“: for more sustainable transport - Consilium (europa.eu), accessed on 06.02.2024

In order to achieve the European Union's climate protection goals for the transport sector, more ambitious targets are needed - in addition to accompanying measures such as a reform of energy tax at national and EU level - both for the ramp-up of electromobility and for renewable fuels. **In the course of implementing RED III into national law and taking multiple credits into account, the VDA advocates ambitious targets for both e-mobility and a 35% reduction in GHG emissions in the fuel sector by 2030.**

I. Renewable fuels are crucial to achieving climate targets in the transport sector

The market for renewable fuels is in the ramp-up phase. Given the future use in several modes of transport and sectors, demand is also increasing. Every option is therefore needed to meet this demand. The focus should initially be on the procurement of renewable fuels and not on their political allocation to certain sectors.

Renewable fuels are needed in road transport to defossilize the existing fleet so that it can make a contribution to climate protection. Even if the federal government's goal of 15 million electric cars by 2030 is achieved, at least 40 million cars and trucks with combustion engines will still be on German roads.

Renewable fuels are also needed for air and sea traffic. Renewable fuels are the key lever for achieving climate protection goals at national and EU level. Quantities that are no longer needed in road traffic in the long term can be diverted to other sectors in the future, as the use of production facilities is only economically viable in the long term. The results are similar to those of a 2023 BeniVer Study funded by the BMWK, which estimates a long-term demand for RFNBO of around 15bn liters across all transport sectors.

It should also be noted that the production of synthetic fuels creates renewable molecules, derivatives and by-products that could also be used for shipping and air traffic or in industry, for example. This modularity of the Power-to-X technology makes it possible to include road traffic in the scaling phase and to link all sectors. It is therefore crucial that the federal government initiates the ramp-up of renewable fuels in the transport sector as quickly as possible in order to meet all needs in the long term.

II. Real GHG reduction of 30% in road transport through renewable fuels necessary

Extrapolated from published registration figures, the vehicle fleet in 2030 will be around 55 million vehicles⁶. A possible calculation example of a fuel mix allowing a real GHG reduction of 30% in road traffic could look like this⁷:

Fuel type	Biofuels (conventional)	Biofuels (advanced)	RFNBO E-Fuels	RFNBO H ₂	Energy	Fossil
Fuel quantity	≈ 1.3bn liters	≈ 5bn liters	≈ 0,8bn liters	-	-	≈ 28,9bn liters
Amount of energy	≈ 12.3TWh	≈ 49TWh	≈ 7.4TWh	≈ 15.7TWh	≈ 35.5TWh	≈ 281TWh

Average WLTP consumption values according to KBA segmentation are used to calculate the required quantities of renewable fuels⁸. By 2030, conventional biofuels are expected to reduce GHG emissions by 80% compared to fossil fuels⁹. Advanced biofuels and synthetic fuels such as hydrogen and e-fuels (RFNBO) show a GHG reduction of 70 to 90%^{10/11}. The share of conventional biofuels will be maintained at the current level of 4.4% (according to Article 26, Paragraph 1 RED III). The ramp-up of advanced biofuels will be based on figures for sustainable biomass potential in the EU¹². The RED III requirements in the transport sector should be implemented via the GHG quota in the Federal Immission Control Act.

However, taking into account the current multiple counts (table below), the GHG reduction rate should be increased to 35% in order to achieve a real GHG reduction of 30%.

Overall, a production volume of around 7.1bn liters of renewable fuels is required in road transport to achieve a real 30% reduction in GHG emissions through renewable fuels in 2030 under the above assumptions. The BEniVer study already cited comes to a similar result. Taking charging current into account with a required energy quantity of 35.5TWh increases the share of renewable energy sources in road transport. The calculations refer to all road transport (passenger cars, light and heavy commercial vehicles).

Fuel type	Biofuels (conventional)	Biofuels (advanced)		RFNBO	Energy
GHG quota requirements	4,4 % (upper limit)	2,6 % (lower limit)	Waste-based 1.9% (upper limit)	-	-
Factor	x1	up to 2,6 %: x1 above: x2	x1	x3	x3

⁶ VDA; KBA - Car inventory by segment: [Kraftfahrt-Bundesamt - Segmente \(kba.de\)](https://www.kba.de/DE/Presse/Pressemitteilungen/2022/22_07_01_KBA_VDA_Kraftfahrzeuginventar_2022.pdf)

⁷ Own calculation

⁸ Own calculation; segmentation according to KBA: [Kraftfahrt-Bundesamt - Segmente \(kba.de\)](https://www.kba.de/DE/Presse/Pressemitteilungen/2022/22_07_01_KBA_VDA_Kraftfahrzeuginventar_2022.pdf)

⁹ BLE - Evaluation report 2022: [Evaluationsbericht_2022.pdf \(ble.de\)](https://www.ble.de/DE/Presse/Pressemitteilungen/2022/22_07_01_BLE_Evaluation_Report_2022.pdf)

¹⁰ JEC Well-To-Wheels report v5: JRC Publications Repository: [JRC Publications Repository - JEC Well-To-Wheels report v5 \(europa.eu\)](https://publications.jrc.ec.europa.eu/publication/?id=JEC-Well-To-Wheels-report-v5)

¹¹ The GHG reduction of renewable fuels will increase over time due to the further development of production processes and the increasing expansion of renewable energies.

¹² Concauwe. Sustainable biomass availability in the EU, to 2050. [Sustainable-Biomass-Availability-in-the-EU-Part-I-and-II-final-version.pdf \(concauwe.eu\)](https://www.concauwe.eu/DE/Presse/Pressemitteilungen/2022/22_07_01_Concauwe_Sustainable-Biomass-Availability-in-the-EU-Part-I-and-II-final-version.pdf)

III. Mandatory separate sub-quota for advanced biofuels and RFNBO

Advanced biofuels are already available in larger quantities today, mainly due to the technological maturity of their production. The combined quota in RED III could therefore be largely met by advanced biofuels. This reduces incentives to invest beyond the minimum amount of 0.5% RFNBO (or 1% in the case of multiple counting). The fact that the Federal Government assumes a greater need for RFNBO than in RED III is shown by the [Nationale Energie- und Klima Plan](#) that it submitted to the EU Commission at the end of 2023¹³. There, it assumes an RFNBO requirement of at least 2.8% in 2030. Since both fuel options contribute to climate protection and are in the process of a market ramp-up, they should be separated as compliance options and mapped out in separate targets - as in RED II. A compliance quota for RFNBO should be set particularly ambitiously here in order to incentivize the necessary investments through binding targets. The VDA advocates an RFNBO sub-quota of at least 5%.

IV. Gradually adjust multiple counting as ramp-up increases

Multiple counting creates an incentive for investments in certain energy sources to meet regulatory requirements, particularly during the ramp-up phase. However, multiple counting has an overall effect on demand if the overarching targets (GHG quota level) do not increase accordingly within the framework of regulation.

As the ramp-up progresses, a growing gap is emerging between the credited (virtual) and the real climate protection. With regard to the implementation of RED III, there is a risk that real climate protection will be up to two-thirds lower than the counted climate protection. The VDA took a critical stance on multiple counting as early as 2022. In order to close the gap between virtual and real climate protection, multiple counting should be reviewed as part of the review of the RED (2027) and ideally abolished in stages by 2030 - but not for hydrogen. In order to ensure investment security for hydrogen production plants and thus to establish a commercial market for green hydrogen in the first place, multiple counting for hydrogen must apply for longer and, depending on the market ramp-up, can be eliminated in stages by the end of the 2030s.

¹³ In implementation of the Paris Agreement, EU Member States must submit so-called "National Energy and Climate Plans" at regular intervals in accordance with Article 3 and Article 14 of the EU Governance Regulation (EU 2018/1999).

V. Set long-term interim targets for 2035 and 2040 now

The current timeframes for planning and approval procedures ensure that the share of renewable fuels will still be low in 2030. RED III can only be a first step on the way to net greenhouse gas neutrality. In order to provide additional incentives for investments and offers now, a long-term, indicative target path is urgently needed that leads beyond 2030 with interim targets to climate neutrality in 2045 (Germany) or 2050 (EU). Such a path already exists for air and shipping, and it urgently needs to be supplemented for road transport. This target framework should prescribe higher annual GHG reductions for the fuel sector. As *interim targets*, the VDA is calling for a GHG reduction through renewable fuels in road transport of **60% by 2035, 90% by 2040 and 100% by 2045**¹⁴. In the interests of climate protection, fossil fuels should no longer be allowed to be sold at German petrol stations from 2045 onwards.

VI. Possible instruments for the ramp-up of renewable fuels

Politicians are called upon to legally establish the absolutely necessary ramp-up of renewable fuels. In order to achieve a real GHG reduction of 30% in the fuel sector by 2030, there are - in addition to regulatory and tax requirements - various options such as a state-supported tendering mechanism for renewable fuels (especially advanced biofuels and RFNBO). This could be designed along the lines of the „H₂ Global“ and the European Hydrogen Bank process and should enable non-discriminatory participation by national and international suppliers. The aim of all politically conceivable instruments: a rapid and scalable technology and market ramp-up. Climate and environmental protection are always the focus.

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¹⁴ The targets for 2040 and 2045 require a gradual, complete reduction in GHG emissions from renewable fuels compared to fossil fuels. This does not take into account the GHG emissions from the construction and dismantling of the respective energy infrastructure required to achieve the targets.

The German Association of the Automotive Industry (VDA) consolidates around 620 manufacturers and suppliers under one roof. The members develop and produce cars and trucks, software, trailers, superstructures, buses, parts and accessories as well as new mobility offers.

We represent the interests of the automotive industry and stand for modern, future-oriented multimodal mobility on the way to climate neutrality. The VDA represents the interests of its members in politics, the media, and social groups. We work for electric mobility, climate-neutral drives, the implementation of climate targets, securing raw materials, digitization and networking as well as German engineering.

We are committed to a competitive business and innovation location. Our industry ensures prosperity in Germany: More than 780,000 people are directly employed in the German automotive industry.

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