

Implementation of RED into national law (requirements for energy sources in transport)

INITIAL SITUATION

The requirements for the transport and fuel sector were adapted to the new climate targets of the Green Deal in the revision of the Renewable Energy Directive (RED) (EU)2023/2413 of 18 October 2023. The minimum share of renewable energies in final energy consumption in the transport sector, which the EU Member States must ensure through an obligation on the distributors of fuels, will increase from 14 to 29 per cent in 2030. Some target fulfilment options are favoured in this calculation through multiple offsetting of energy quantities. Alternatively, the Member States can ensure compliance with the RED by setting a greenhouse gas reduction (GHG) quota of at least 14.5 per cent. In addition, a combined minimum quota of 5.5 per cent of the final energy content for advanced biofuels¹ and renewable fuels of non-biological origin (RFNBO) applies for 2030. RFNBOs must account for at least 1 per cent of fuel sales in transport. The scope of the RED's transport destination must include all modes of transport and not just land-based transport, unlike it previously did. The new RED requirements must be transposed into national law by 21 May 2025, which in Germany requires an amendment to the Federal Emissions Control Act and the Federal Emissions Control Ordinance. The current Federal Emissions Control Act already fulfils the new overarching EU target with a GHG reduction of 25 per cent, but the German national climate target of -65 per cent (2030) goes beyond the EU's Green Deal.

1 AMBITIOUS OVERALL QUOTA SO AS NOT TO MISS CLIMATE TARGETS

In addition to the ambitious overall German climate target, the national CO₂ target under the Effort Sharing Regulation ((EU)2023/857), which covers around 55 per cent of total emissions and primarily affects the building and transport sectors, is also very ambitious. Germany runs the risk of massively missing the 2030 target. Ambitious fuel targets are urgently needed to avoid the threat of billions in compensation payments to other Member States – money that would be lacking for the transformation – and to achieve our own climate targets.

¹ In accordance with Annex IX Part B of the Renewable Energy Directive (2023).

Recent years have shown that the supply of renewable fuels, especially advanced biofuels, has developed much faster than expected. The previous GHG reduction targets in the Federal Emissions Control Act have proven to be far too low and have been exceeded many times over in recent years. Therefore, ambitious adjustments to the GHG quota are necessary and can also be realistically realised. The increase in the quantities of renewable fuels required to meet the target can be achieved in the existing system by increasing the target in 2030 or by expanding the scope of the GHG quota to include transport sectors that have not yet been taken into account, such as aviation and shipping.

A real reduction in emissions intensity in the GHG quota mechanism's coverage area of up to 30 per cent should be targeted by 2030 in order to achieve the climate targets in the transport sector. Either the GHG reduction quota should be increased from 25 to 35 per cent, taking into account the current scope of validity and the multiple offsets in the Federal Emissions Control Act, or the scope of validity should be extended to include shipping and aviation while retaining the 25 per cent target and the existing multiple offsets. In view of the complex regulatory mechanisms of the GHG quota and in order to strengthen confidence in the GHG quota market, the target values and the underlying assumptions should be determined in a very transparent process and made available to the public. In this context, transparency should also be improved with regard to quantities, origin and prices in a more comprehensive monitoring process.

2 ACCELERATE THE RAMP-UP OF RFNBOS WITH SUB-QUOTAS

The minimum quotas for advanced biofuels and RFNBOS should be implemented separately in the Federal Emissions Control Act. RFNBOS will be the long-term energy source primarily in the heavy goods and long-distance transport sector, in addition to electricity. We expect that the RFNBO sub-quota stipulated in the RED and the German GHG quota will be met in particular by green hydrogen, where massive production capacities are being built up in Germany, Europe and the around the world. However, we do not see a comparable development for synthetic fuels (e-fuels).

60,000 metric tons of hydrogen could already be sufficient (triple counting taken into account) for a minimum RFNBO quota of 1 per cent, as required by the RED. This is too little and does not create market incentives for RFNBO investments. An RFNBO quota of 5 per cent in 2030 (also taking triple counting into account), on the other hand, sends a strong signal and also takes into account the needs identified in the Federal Ministry for Digital and Transport's cleanroom discussions, especially for heavy commercial vehicles. As before, the operational implementation of the RFNBO sub-quota should be based on the biofuel quotas in the form of certificate trading. Non-compliance with the sub-quota must continue to be punishable by a penalty.

3 SETTING MARKET INCENTIVES THROUGH LONG-TERM TARGETS AND REGULATORY FRAMEWORKS

Electricity and RFNBOS are already counted three times towards the targets under current legislation. We believe this is right because they will be an indispensable source of energy for transport in the future.

Multiple offsetting significantly supports investment decisions for large-scale commercial systems. Additional revenue can be generated through quota trading, which can be passed on to the end customer in order to offer competitive RFNBO prices at an early stage. Favourable prices stimulate demand decisively. A commercial market for green hydrogen and its derivatives in the transport sector can thus be quickly established.

Long-term regulatory frameworks that create the necessary investment security are crucial for success. This also includes dealing with multiple offsetting for RFNBOs. The revision of the Federal Emissions Control Act and the Federal Emissions Control Ordinance should stipulate multiple offsetting for RFNBOs for production plants commissioned by 2035 for at least the first ten years of operation of a plant.

In recent years, we have repeatedly seen that major investments are only made with the necessary planning certainty. Stable regulatory frameworks are also necessary for long-term investments in hydrogen infrastructures. It was only thanks to the Renewable Energy Sources Act with feed-in rates fixed for 20 years that solar and wind power were able to establish themselves and develop an exponential dynamic.

In addition, a GHG reduction target is also required for the period up to 2040. The RED only stipulates targets up to 2030, as does the current Federal Emissions Control Act.

Long-term targets are a basic prerequisite in order to establish RFNBOs and green hydrogen in particular on the market. The amendments to the Federal Emissions Control Act and Federal Emissions Control Ordinance should also set GHG targets and minimum quotas for the years 2031 to 2040. The targets should be designed in such a way that climate neutrality is achieved in the transport sector by 2045, as stipulated in the long-term climate target for Germany. Ambitious GHG emission targets should be set for 2035 and 2040 that are based on the targets in the transport sector for this period.

EXPERIENCES AND OUTLOOK

The GHG reduction target previously enshrined in the Federal Emissions Control Act and the 38th Federal Emissions Control Ordinance, as well as the minimum and maximum quotas for fuel importers and multiple offsetting, have meant that the targets have currently been achieved without much effort. In particular, the sub-quota for advanced biofuels has been exceeded in the last two years.

Fuel volumes were therefore carried over to the following year, with the effect that fewer advanced fuels were brought onto the market in real terms than would have been possible.

The overfulfilment also led to a sharp decline in quota trading and a drastic fall in quota prices. As a result, the well-intentioned incentive mechanisms established in legislation lost their effect. The economic viability of investments in the hydrogen ramp-up is thus at massive risk. This shows how important it is not only to set ambitious targets, but also to tailor them to the market – and to ensure the integrity of the products used, especially imported products. Similar experiences were made ten years ago with too many certificates in emissions trading. The very low price level of emission certificates did not lead to the intended reduction in emissions under the given regulatory frameworks,

which is why an intervention in the mechanism was necessary. ReFuelEU Aviation and FuelEU Maritime will have to be implemented in parallel and will interact with GHG quota trading and the use of hydrogen, depending on the design of the scope of application and the respective (sub-)quotas.

This experience must be taken into account in the revision of the Federal Emissions Control Act and long-term, ambitious targets must be set to accelerate and incentivise the ramp-up of renewable energies in the transport sector.

A correction mechanism (such as a minimum price) that can be used to stabilise the market for the entire ramp-up process should be created – as far as possible on a rule-based and annual basis – in the event that the GHG quota model as a whole or the RFNBO sub-quota is heavily oversupplied. This will significantly improve the regulatory frameworks for confidence in the corresponding projects and their financial viability. There is an urgent need to examine and develop specific models for such correction mechanisms. The NWR will play a constructive role in the development of such a mechanism.

The NWR ultimately considers it urgently necessary that the pending amendments to Sections 37(a) to (h) of the Federal Emissions Control Act and the 37th and 38th Federal Emissions Control Ordinances be adopted in the abovementioned sense before the end of the 20th legislative period against the background of the current political situation in Germany and in view of the major role of the GHG quota mechanism for the ramp-up of hydrogen and hydrogen derivatives in the transport sector as well as the current distortions in the GHG quota market.



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THE GERMAN NATIONAL HYDROGEN COUNCIL

On 10 June 2020, the German Federal Government adopted the National Hydrogen Strategy and appointed the German National Hydrogen Council. The Council consists of 26 high-ranking experts in the fields of economy, science and civil society. These experts are not part of public administration. The members of the National Hydrogen Council are experts in the fields of production, research and innovation, industrial decarbonisation, transportation and buildings/heating, infrastructure, international partnerships as well as climate and sustainability. The National Hydrogen Council is chaired by former Parliamentary State Secretary Katherina Reiche.

The task of the National Hydrogen Council is to advise and support the State Secretary's Committee for Hydrogen with proposals and recommendations for action in the implementation and further development of Germany's National Hydrogen Strategy.

◆ **Contact: info@leitstelle-nws.de, www.wasserstoffrat.de/en**