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XPPD

HOQGHFGMXWGEHZRGRQGLWRQVLQGHWLQLQLWKRWP
HFWLELWHFWHKFHVSRPWHFWRXLQKDODEHQXRU
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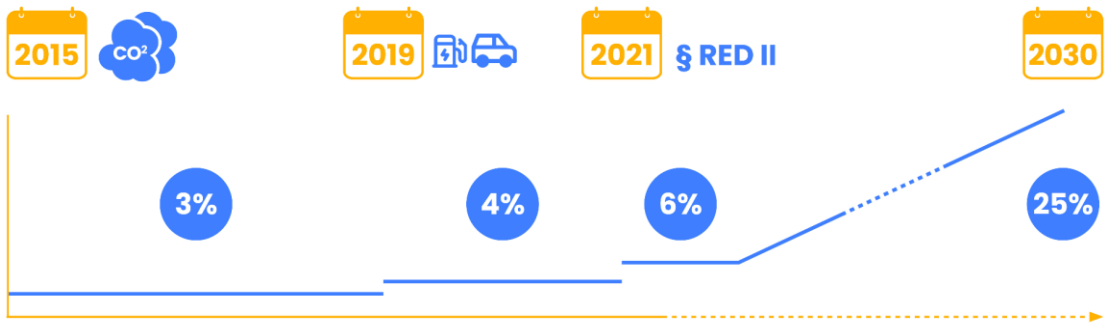
GZHGEHPNWGDEHRUDGLQHPXWHQRGLVDOWRU
VWWPSHWZKGRQRWLDZOQFHSRLQW

KNGHPQGVDFH

- I n the case of a direct connection between V s stems and the charging oint, it must be ossible to feed in and market the sur lus solar electricit into the ublic grid.
- rivate charging with a V s stem must not be disadvantaged com ared to ublic charging when determining the GHG uota.
- uantit -based crediting should also be enabled for non- ublic charging and double counting for ublic charging should be avoided.
- S ecial cases such as com an cars and leasing models should be included in the regulation.
- Multi le ooling to sell allowances would be ractical. n ada ted regulator framework should therefore ma it.

Background

In Germany, distributors of diesel and gasoline are required by law to reduce greenhouse gas emissions by a certain percentage each year.
(greenhouse gas reduction quota, or GHG quota for short). Initially, the obligated companies had to meet a GHG quota of three percent. In 2019, this then rose to four percent for the first time, and to six percent in 2020. With the amendment to the Act on the Further Development of the Greenhouse Gas Reduction Quota, which is to come into force on Jan. 1, 2022, a steady increase in the quota to 25 percent in 2030 was set in May 2021. Since 2019, electricity consumed in electric vehicles has also been available as a compliance option for the petroleum industry.



All-electric vehicles in particular contribute to greenhouse gas reductions in transport and to growth and employment. The promotion of electricity used in vehicles should also support the development of the charging infrastructure. Green electricity plays a key role here, as it decisively increases the climate protection effect of electromobility.

In addition to the GHG Quota Act, the caretaker federal government passed a comprehensive package of ordinances in November entitled "Ordinance on the Establishment of Further Provisions for the Further Development of the Greenhouse Gas Reduction Quota," in which the precise framework conditions for trading in the quotas are to be defined and the EU Renewable Energies Directive (RED II) is now to be transposed into German law. The BMU is responsible for this. The provisions of the regulation will also apply from January 1, 2022.

The central changes of the VO include

- In the future, the operators of the charging points (from commercial to private e-mobilists) will take the place of the electricity suppliers as the new quota fulfillers.
- To support the development of charging infrastructure, the energetic amount of electricity used in electric vehicles will be counted at three times its energy content for the purpose of meeting the GHG quota (in accordance with EU Directive 2018/2001).
- Zn addition, a direct physical connection between the generation facility and the charging point (for example, through a rooftop photovoltaic system) is specially rewarded by setting the emission factor at zero for the calculation of the GHG quota[1]
- In addition, the penalty payment (so-called penalty) is increased from 470€ to 600€ per ton of CO2. This penalty payment is due if an obligated company does not meet the GHG quota. It is therefore an important benchmark for the GHG quota prices that can be achieved on the market.

The charging of traction current is regulated in a Federal Immission Control Ordinance (38th BImSchV). On the one hand, electricity can be credited if it is taken from the grid at publicly accessible charging points (§6 BImSchV). On the other hand, non-public charging can also be credited: For each purely electric vehicle that was registered in the respective commitment year, a lump-sum estimated value of 1,943 kWh can be credited (§7 BImSchV).

The amount of charging electricity that was placed on the market can be counted three times towards the GHG quota from 2022 onwards (from 1.1.2022 in accordance with §5 BImSchV, as already mentioned above). And in the case of a direct connection with a PV system (within the meaning of §61a No. 2 EEG) and a publicly accessible charging point, a GHG quota that is approx. 2.7 higher than the emission factor for electricity from the public power grid is credited.

[1]To determine the creditable GHG reduction quantity for electromobility, the value for greenhouse gas emissions of the German electricity mix (61.2 kilograms per kilojoule, as of 2020) from the Reference emission factor for fossil fuels (94.1 grams of CO2 per megajoule, as of 2020) subtracted.

Demands

Requirement 1: Allow feed-in and marketing of surplus electricity volumes.

The possibility of crediting public charging via RE direct connections with an emission factor of zero is welcome in principle.

Most public charging stations do not have a direct connection to renewable electricity generation. And if they do, the current reference to §61a No. 2 EEG and the associated better position with regard to the greenhouse gas reduction factor does not apply in practice. This is because the requirement is only met if the electricity generation plant of the self-supplier is neither directly nor indirectly connected to a grid (a so-called stand-alone plant). It must be assumed that there is an editorial oversight here, which should be corrected quickly. The only requirement should be the waiver of a payment claim according to §19 EEG. The plant in question could be connected to the grid, surpluses could be marketed within the framework of other direct marketing.

Requirement 2: Forderung 2: Sharpening the quota by crediting the direct-supply PV system.

The regulation, which has so far been very restrictive, limits access to GHG quotas for traction current from solar installations only to public charging points. However, this sector will be relevant in the future in the area of non-public charging - especially for private households and multi-family homes. This is precisely where the market ramp-up of electromobility is taking place. Accordingly, the ordinance should also make it possible to credit direct green electricity accordingly for non-public charging. Especially since the incentive to charge at sunny times is increased to a maximum, which contributes significantly to the relief of the grids through the increasing e-mobility.

The extension to private charging would become a real booster for PV expansion. Currently, the achievable quota prices are around 500 Euro/t CO2. Depending on the development and the emission factors to be taken into account for electricity, the above-mentioned order of magnitude would be the above-mentioned order of magnitude would be achievable for private charging. This is a very interesting model for PV system operators and EMobilists. The refinancing of the PV system could be largely be ensured to a large extent through the use of the GHG quota. This is an important safeguard for economic operation, especially in view of the sharp drop in compensation for the economic operation of the plant. In the future, the PV system could be operated segments could be operated completely without EEG compensation. Any surplus quantities are then simply sold at the market price.

An adjusted GHG quota promotes sector coupling and offers an alternative refinancing to the EEG subsidy, especially for the small plant segment and in the area of tenant electricity. Provided that the PV system is combined with an electric charging infrastructure/electric charging points or the system operator is the vehicle owner of an electric car.

However, when implementing this proposal, it must be ensured that PV system operators who do not have their own charging points or wallboxes will not be disadvantaged in the future.

Requirement 3: Enable volume-based charging also for non-public charging points

In addition to the electricity from one's own PV system, green electricity purchased from the grid should also be better included in the PV electricity from one's own roof. For this purpose, consumption-based charging should also be ensured for non-public charging, especially for commercial vehicles. Due to the high sales volume, the costs for recording power measurement and control would be amortized relatively quickly. At present, it is not possible to charge for consumption, but only on the basis of flat-rate values. The further development outlined would also result in kWh-based billing of the traction current, reflecting the size of the e-vehicle. This is particularly important in the commercial non-public sector (such as logistics centers or public transport), because currently an electric bus receives the same amount of credit as an electric Smart car. So far, e-trucks are not reflected in the system at all, i.e. private charging of logistics fleets, for example, is excluded from quota trading.

In the short term, the introduction of a choice between measured values and lump-sum values could increase the attractiveness - in the long term, measured values should be taken into account where commercial vehicles are used, especially at non-public charging points. In this context, it would also be helpful to clarify the evidence required for semi-public charging.

In addition, double counting should also be avoided. Currently, a vehicle at a publicly accessible charging station could be billed twice at the UBA. This is the case when employees of the charging point operator charge their private e-vehicles at the public charging point. Here, on the one hand, CPO can calculate the kWh values

of the charging station and, on the other hand, each employee can submit his or her vehicle registration certificate.

Requirement 4: Simplify special cases without personal identity

Unfortunately, the draft regulation for non-public charging according to § 7 does not include an answer for certain special cases, such as when the charging point operator is not also the vehicle owner, e.g. for company cars or leasing models. Here, too, there should be a choice as to whether the certificates are credited to the employer or the user of the vehicle.

Requirement 5: Enable two-stage pooling to sell the certificates

Finally, the new regulation should allow for two-tier pooling. This would be of high value for a practical implementation in order to make all electricity volumes chargeable in the market. By aggregating the volumes in two steps, first, by the direct electromobility service providers for owners of private and commercial e-vehicles and, in the second step, by the quota service providers, the potential of almost all e-vehicles in Germany would be tapped. And finally, it would make sense for the mobility turnaround if creditability not only of passenger cars but also of smaller vehicles were to be included in the quota system.

Proposed amendment to the 38th BImSchV:

„§ 5

Crediting of electric power used in road vehicles with electric drives

((4) For the purpose of calculating the greenhouse gas emissions of electric power pursuant to

paragraph 2, the value of the average greenhouse gas emissions per unit of energy

electricity of the respective renewable energy in Germany shall be used if,

1. exclusively electricity from renewable energies in accordance with section 2 (5) no. 1

and 2 is used and

2. the electricity is not taken from the grid pursuant to § 3 no. 35 of the Renewable Energies Act, but is drawn directly from an electricity generation plant

in accordance with section $ 3 (1) of the Renewable Energy Sources Act, and

3. there is no entitlement to payment pursuant to section 19(1) of the Renewable Energy Sources Act.