



Implementation of RED II (art. 25 - 28) in Germany





Key instrument: GHG-quota

Obligation

Reduction of total GHG emissions of supplied fuel
compared to fossil fuel by 6%

Obligated party

Fuel suppliers (e.g. mineral oil companies, fuel traders, refineries)

buy emission reductions

Option

UCO

green hydrogen used in
refineries

electricity used in BEV

from

Third party

Bio fuel suppliers

hydrogen producers

electricity providers for BEV



Framework

- GHG reduction quota to implement in 2015, transposing the EU requirements from the Renewable Energies Directive and the Fuel Quality Directive
- Strong consensus among stakeholders to continue GHG quota for promotion of renewable energy in transport.
- Significant expansion/gain in importance of new compliance options from RED II.
- In the coming years DE expect significantly more compliance options to achieve GHG reductions.



Key criteria

- Contribution to **climate protection, environmental protection and nature conservation.**
- **Resulting costs** are passed on to the consumer; thus only truly sustainable options are justifiable
- **High targets must be achievable** (availability of raw materials, technical feasibility, availability of renewable energy), otherwise there is a risk of penalties (and further price increases)
- **Obligations must be fixed for the long term** and should vary as little as possible during the implementation period (investment and planning security)



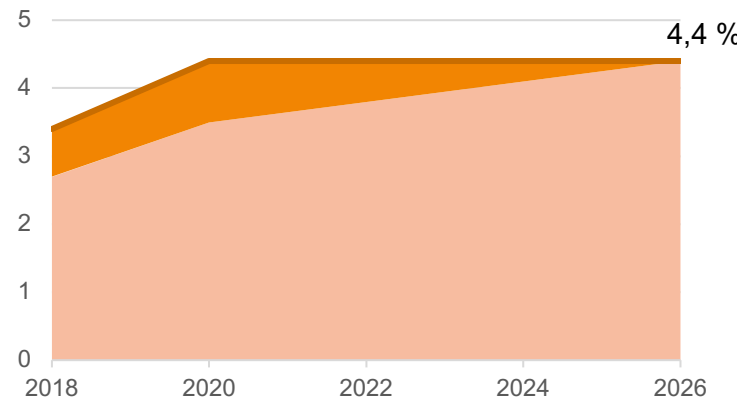
I. Biofuels from food and feed crops

- Agreement (2017): „Cap according to the status quo“
- Climate protection program 2030 (2019): „No expansion of cultivation areas“

Draft proposal

Upper limit/cap of 4,4 % (estimated status quo 2020)

1. Mainting current quantities
2. High-iLUC-risk-Phase-Out in 2026





II. A Advanced Biofuels

- Feedstocks for Annex IX A fuels are limited in DE
- Production facilities are not yet available, especially for liquid biofuels.

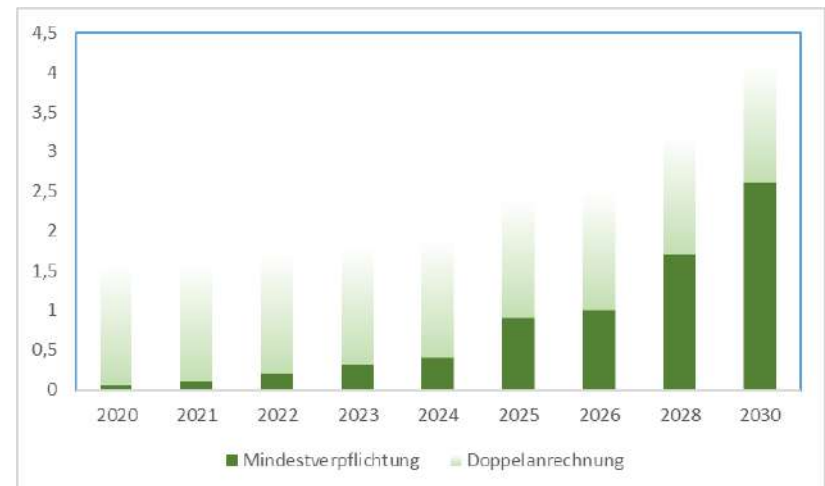
Draft proposal

2-tier model

**Tier 1: (energetic) sub mandate
(2,6 % in 2030)**

**Tier 2: double counting of quantities
exceeding sub mandate**

Strong incentive without obligation!





II. B UCO und animal fat

- UCO is a limited resource
- Animal fats (valuable feedstock in oleochemistry) are excluded in DE. However, 97 % of cat 1 and 2 fats in DE are being processed to biofuels

Draft proposal

- 1. Promotion of animal fat (cat 1 + 2, high and medium risk)**
- 2. 1,9 % UCO-cap (has to be approved by EU COM)**

Cat 3 animal fats and waste from food processing will still be excluded.



III. E-Fuels/RFNBOs

- Currently no production facilities.
- E-fuels are expensive and highly inefficient, no other alternative in aviation.
- Promotion of green hydrogen in refineries has advantages for many other sectors.

Draft proposal

1. **Double counting of all RFNBOs (hydrogen in refineries, liquid fuels etc)**
2. **Compliance option, but no mandate in road transport!**
3. **E-Fuel mandate in aviation: 0,5 % in 2026, 1 % in 2028, 2% in 2030 (9 PJ)**

Further provision will be implemented once del acts are adopted.



IV. Electricity

- Number of BEV in 2030 is uncertain
- Current system has no positive effects on charging infrastructure

Draft proposal

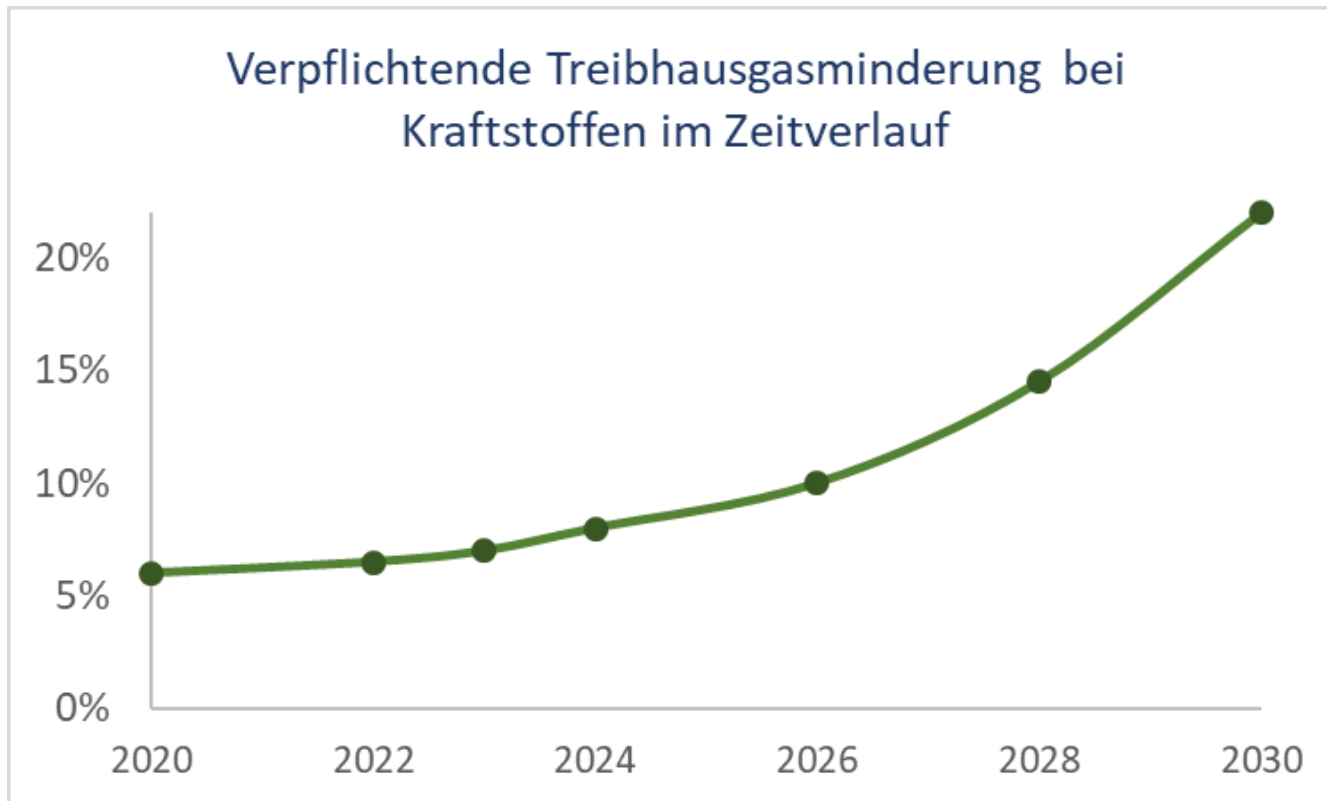
1. **Triple counting**
2. **Charge point operator will become third parties**
3. **Adjustment mechanism (in case of high number of BEV)**

Fuel providers contribute to the transformation of the transport sector, incentives for operating public charging infrastructure and electric vehicle fleets



GHG-quota: overall target

GHG-quota: **22 % in 2030** (~ 28 % renewable energy in transport)





Summary

	2022	2023	2024	2026	2028	2030	
GHG-Quota (CO₂-reduction in road transport)	6,5 %	7 %	8 %	10 %	14,5 %	22 %	
Food and feed crops (cap, energy)	4,4 %						
UCO and animal fats (cap, energy)	1,9 %						
	2022	2023	2024	2025	2026	2028	2030
Advanced biofuels (sub-mandate, energy)	0,2 %	0,3 %	0,4 %	0,7 %	1,0 %	1,7 %	2,6 %
	Double counting of quantities exceeding sub-mandate						
Hydrogen and E-Fuels/RFNBOs	Double counting						
Electricity	Triple counting						
Aviation	Mandate for e-kerosene: 0,5 % in 2026, 1 % in 2028, 2 % in 2030						