



IEA Bioenergy
Technology Collaboration Programme



T39 | Business meeting 04/2021

“Country report Germany”

Franziska Müller-Langer | April 19, 2021

The IEA Bioenergy Technology Collaboration Programme (TCP) is organised under the auspices of the International Energy Agency (IEA) but is functionally and legally autonomous. Views, findings and publications of the IEA Bioenergy TCP do not necessarily represent the views or policies of the IEA Secretariat or its individual member countries.

Agenda

- 1 | Status quo and targets
- 2 | Outlook until 2030

Please see also:

Background paper GHG Quota (2021)

https://www.dbfz.de/fileadmin//user_upload/Referenzen/Statements/Background_Paper_GHG_Quota.pdf

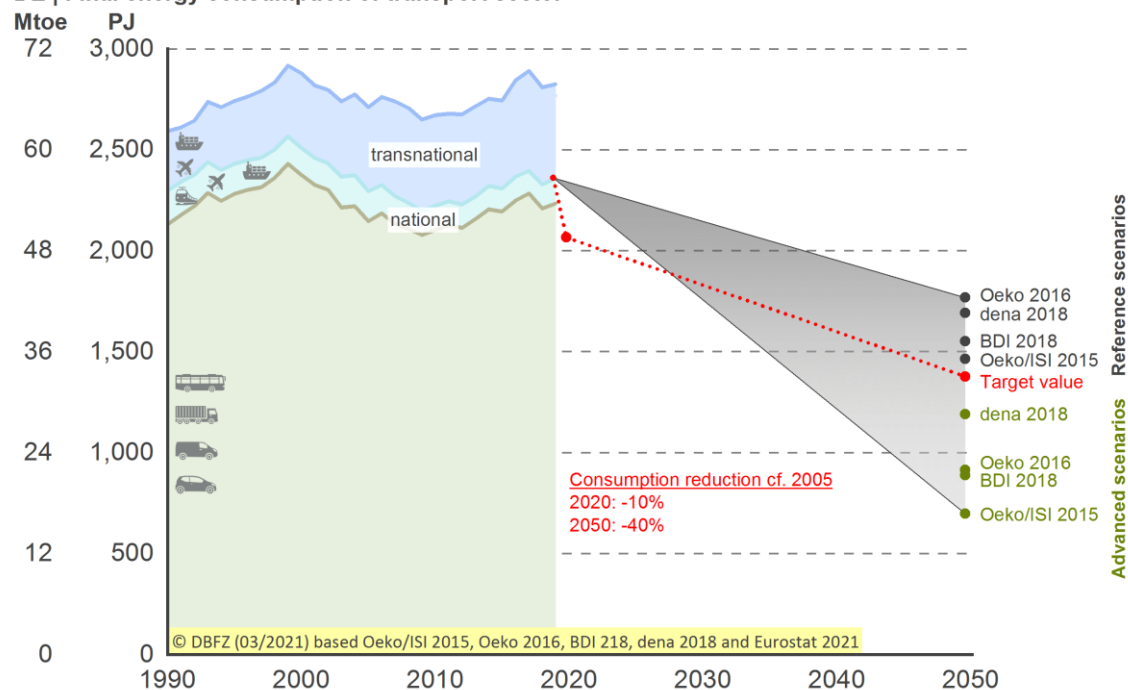
Decarbonisation transport - Country assessments (2020)

https://iea-amf.org/app/webroot/files/file/Annex%20Reports/AMF_Annex_58_Scenarios%20and%20Contributions%20in%20Selected%20Countries.pdf

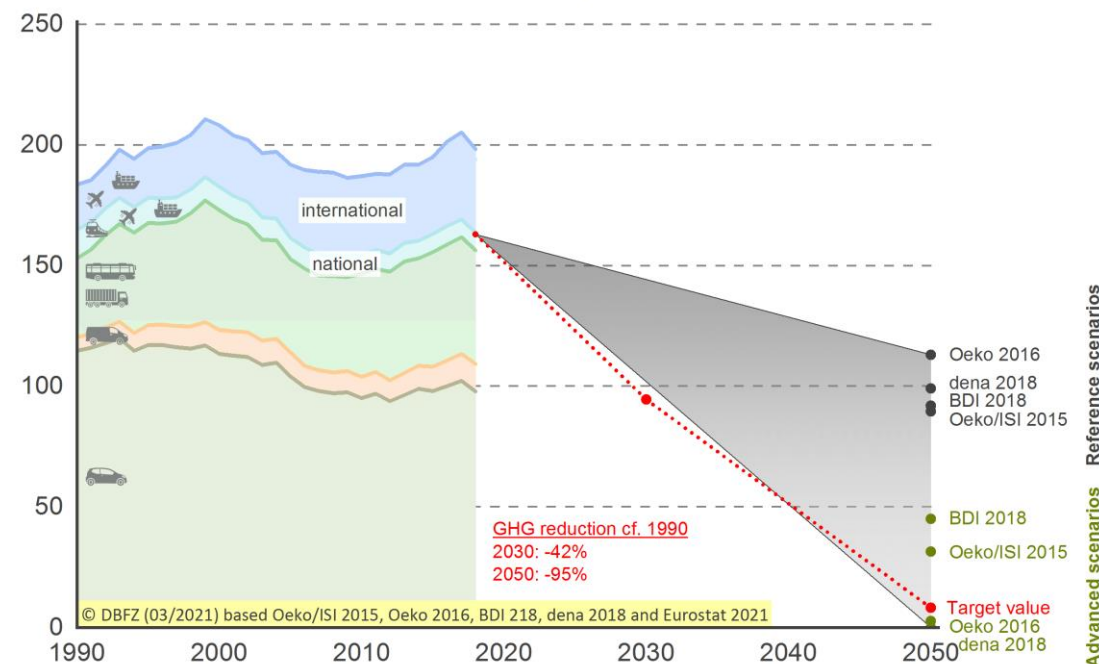
Status quo and targets

Final energy demand and GHG in transport

DE | Final energy consumption of transport sector

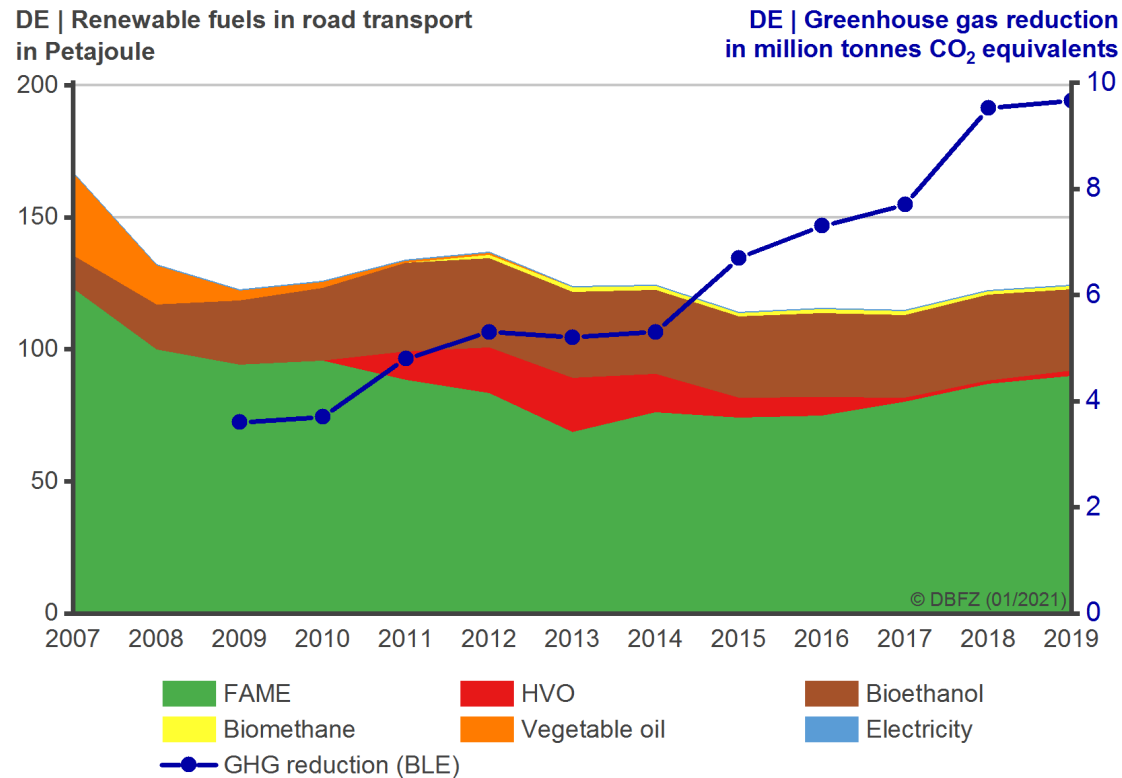


DE | GHG emissions in million metric tonnes CO₂ equivalents



Status quo and targets

Fuels and GHG impact within the quota in Germany



- From 2007 Biofuel quota energetic >> 2010-2014 at 6.25%
- From 2015 GHG quota based on GHG reduction: 3.5% by 2015/2016, 4% in 2017-2019, from 2020 6%
- Since 2015 stepwise expansion of fulfilling options, e.g. fossil gaseous fuels, electricity, e-fuels (PTx), and upstream emission reductions (max. 1.2%)
- Status 2019: about 10 million tonnes GHG reduction realized by about 130 PJ as substitutes of fossil fuels

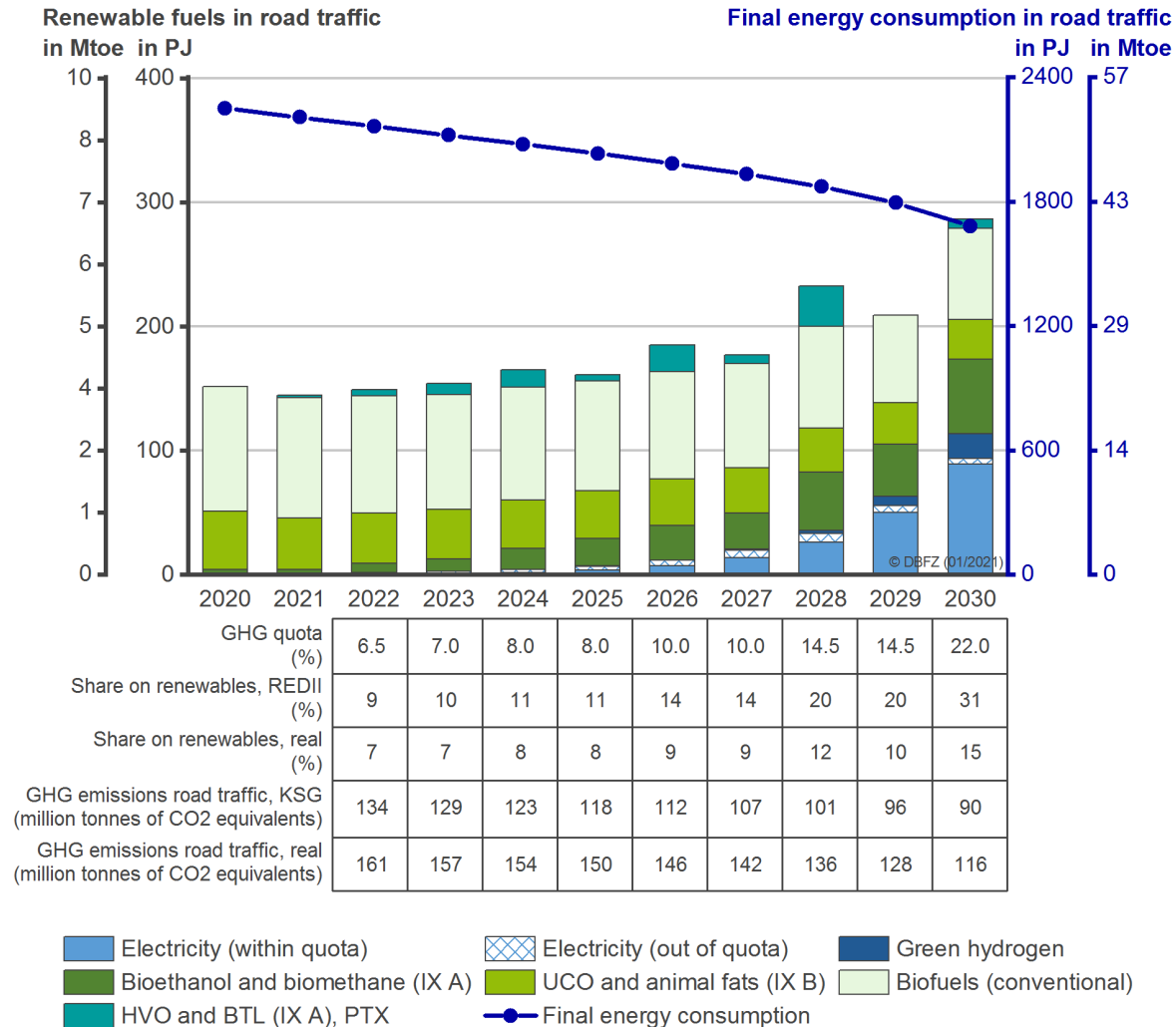
Outlook until 2030

Transposition of REDII into German BImSchG

Cabinett decision in 02/2021	Explanation	2022	2023	2024	2025	2026/2027	2028/2029	2030
GHG quota total	Minimum share GHG reduction	6.5%	7.0%	8.0%	8.0%	10%	14,5%	22%
Fullfilling options for GHG quota								
<i>Advanced biofuels (REDII Annex IX, A)</i>	Minimum share energetic, 2fold counting for amounts above minimum share	0.2%	0.3%	0.4%	0.7%	1.0%	1.7%	2,6%
<i>Biofuels based on used cooking oil and animal fats (REDII Annex IX, B)</i>	Maximum share energetic	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
<i>Conventional biofuels based on crops that can also be used for food and fodder</i>	Maximum share energetic, phase out of palm oil by 2026	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
<i>Electricity</i>	3fold counting (electricity - as defined mix - from public charging points, private BEV and fleets)							
<i>Green hydrogen and follow products (PTx/e-fuels)</i>	2fold counting of amounts for refineries and for use in road transport							
<i>PTL jet fuel</i>	Minimum share energetic on JET A-1					0.5%	1.0%	2.0%

Outlook until 2030

Possible scenario for GHG quota until 2030 in road transport



- GHG quota in 2020/21: 6%
- RE share target in 2030: min. 14%
- Relative share of renewable fuels depend on development of final energy consumption in transport, esp. in road transport
- Options that contribute to the GHG quota follow a specific order fulfilling the minimum requirements followed by maximum possible shares (also due to blend walls) and increasing GHG mitigation costs



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