

Political framework conditions for advanced biofuels in the transport sector in the EU, Germany and Romania

What we need for a sustainable future

Many member states have a large untapped potential of residues and waste materials that could serve as feedstock for biofuel production. Various studies show that agricultural residues such as cereal straw are sustainably available. If all sustainably available feedstock was converted into advanced biofuels, 16% of the energy demand in the transport sector could be covered by 2030. This would result in additional revenues of 15 billion euros for the European economy as well as 300,000 new jobs in predominantly rural areas. Therefore, we need a policy that promotes the production of advanced biofuels. A smart climate policy is essential for a future-oriented economic policy that promotes investment and creates jobs.



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What we need for this:

- I. All available and sustainable greenhouse gas (GHG) reduction options must be used.
- II. Investments in production capacities and logistics chains are needed to make innovative technologies available on an industrial scale.
- III. There needs to be an incentive for these investments. Long-term stable political framework conditions enable industry to build up production capacities, establish new value chains and make targeted investments in research and development.



Background

At the end of 2015, 195 parties, including the EU, agreed in the Paris Climate Agreement to achieve a greenhouse gas neutral global economy between 2050 and 2100. To achieve this goal, the EU aims to reduce GHG emissions in the European Union by 80% by 2050 compared to 1990 levels. The transport sector is responsible for a quarter of GHG emissions in Europe and transport-related GHG emissions continue to rise. In order to have a realistic chance of achieving the goals of the Paris Agreement, it is therefore essential to reduce these transport-related emissions through climate-neutral alternatives. Advanced biofuels made of agricultural residues such as wheat straw or corn stover can make an important contribution to this. They save GHG emissions of up to 95% and can be used within the existing infrastructure.



Political framework conditions in the EU

As part of the European Green Deal, the EU has set itself the binding goal of achieving climate neutrality by 2050 with the European Climate Change Act. To achieve this goal, the EU adopted „Fit for 55“, a package of measures to reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990. With „Fit for 55“, the Renewable Energy Directive RED II, which has been in force since 2018, is also to be revised (RED III):

- The share of renewable energy in gross final energy consumption is to be increased from 32% (RED II) to 40% (RED III) by 2030.
- In the transport sector, the share of renewable energy is to be increased from 14% (RED II) to 24% (RED III) by 2030.
- The share of advanced biofuels is to be increased from 1.75% (RED II) to 2.2% (RED III) by 2030.



Implementation in Germany and Romania

In order to implement the EU targets at national level, Germany and Romania have taken the following measures:

Germany

- I. **Federal Emission Control Act:** fuel suppliers are obliged to reduce the greenhouse gas emissions of the total quantity of fossil petrol, fossil diesel and biofuel they place on the market by 7% from 2022 and by 25% from 2030 compared to a reference value to be calculated.
- II. **Greenhouse gas (GHG) reduction quota:** the share of renewable energies in transport is to increase to 32% by 2030. The share of advanced biofuels is to be increased from currently zero to at least 2.6% by 2030.
- III. **Climate Protection Plan 2050 of the Federal Government:** it describes measures to implement the Paris Climate Agreement. By 2030, a greenhouse gas reduction of at least 55% is to be achieved compared to 1990. The transport sector is to contribute to this target with 40 to 42% of GHG savings.

Romania

- I. By 2030, the share of renewable energy in transport must increase from 10% (2020) to 14.2%.
- II. The biofuel quota for petrol should be at least 8%.
- III. Advanced biofuels are double counted towards the 8% target.

Sources:

Pariser Klimaschutzabkommen: https://ec.europa.eu/clima/policies/international/negotiations/paris_de

EUR-Lex, Document 52020DC0562, 2020: <http://www.eur-lex.europa.eu>

EU Climate Target Plan 2030: Key contributors and policy tools, 2020: https://ec.europa.eu/commission/presscorner/detail/en/fs_20_1610

Alternative transport fuels elements of the European Union's "Fit for 55" package - International Council on Clean Transportation (theicct.org):

<https://theicct.org/publication/alternative-transport-fuels-elements-of-the-european-unions-fit-for-55-package/>

Bundesimmissionsschutzgesetz: <https://www.gesetze-im-internet.de/bimsg/BJNR007210974.html#BJNR007210974BJNG011202116>

Die Bundesregierung: CO₂-Ausstoß von Kraftstoffen senken: <https://www.bundesregierung.de/breg-de/suche/weniger-co2-in-kraftstoffen-1850472>

Klimaschutzplan 2050 der Bundesregierung: https://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimaschutzplan_2050_bf.pdf

The 2021-2030 Integrated National Energy and Climate Plan: https://ec.europa.eu/energy/sites/ener/files/documents/ro_final_necp_main_en.pdf

Epure, Overview of biofuels policies and markets across the EU-27 and the UK:

<https://www.epure.org/wp-content/uploads/2021/01/2021104-DEF-REP-Overview-of-biofuels-policies-and-markets-across-the-EU-Nov.-2020.pdf>

