EU Amendment Directive

BIOFUELS AND INDIRECT LAND-USE CHANGES

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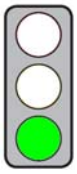
Centrum für Europäische Politik

KEY ISSUES

Objective of the Directive: The greenhouse gas emissions resulting from indirect land-use changes are to be reduced through the transition to "advanced" biofuels and the reduction of greenhouse gas intensity of biofuels.

Parties affected: Companies producing or selling biofuels or supplying resources for biofuels.



Pro: (1) Taking account of indirect land-use changes in assessing the greenhouse gas balance of biofuels is principally appropriate.

(2) Limiting the extent to which conventional biofuels count to half of the 10% expansion target for renewable energy is justifiable as a partial correction of political shortcomings.

Contra: –

CONTENT

Title

Proposal COM(2012) 595 of 17 October 2012 for a **Directive** of the European Parliament and of the Council amending Directive 98/70/EC **relating to the quality of petrol and diesel fuels** and amending Directive 2009/28/EC **on the promotion of the use of energy from renewable sources**.

Brief Summary

- **Background and targets**
  - Replacing fossil fuels with "biofuels" serves to comply with the following requirements of the Renewable Energy Directive (2009/28/EC) and the Quality of Petrol Directive (98/70/EC):
    - By 2020, each Member State in the EU must ensure that for all transport modes the share in energy from renewable sources is at least 10% of the final energy consumption in the transport sector (Art. 3 (4) DIR 2009/28/EC).
    - By 2020, fuel suppliers must reduce the "life cycle greenhouse gas emissions" per energy unit ("greenhouse gas intensity") from biofuels used by road vehicles, mobile machinery and devices and agricultural and forestry tractors by at least 6% (Art. 7a (2) lit. a DIR 98/70/EC).
      "Life cycle greenhouse gas emissions" means all emissions per energy unit resulting from its generation, transport, sale, processing and combustion (Art. 2, No. 6, DIR 98/70/EC; calculation method see CEP Policy Brief).
  - If the cultivation of plants for the production of biofuels crowds out the cultivation of plants for foodstuffs, feeding stuffs and textile fibre production, under certain conditions unused agricultural for the latter will be turned into arable land ("indirect land-use changes").
  - If, in the case of indirect land-use changes, areas with high carbon stocks (e.g. woods, wetlands) are turned into arable land, this can
    - lead to "significant greenhouse gas emissions" (Recital 4) and
    - fully or partially negate the greenhouse gas savings through biofuels (p. 2 et sqq.).
  - The Commission wishes to prevent an increase in greenhouse gas emissions due to indirect land-use changes (p. 2 et sqq.). To this end, it wishes to amend the Renewabe Energy Directive and Quality of Fuel Directive.
  - Since indirect land-use changes and the resulting greenhouse gas emissions cannot be measured exactly but only estimated [Impact Assessment Document SWD(2012) 343, p. 12], the Commission wishes to address them "under a precautionary approach" (p. 2) through
    - the transition from "conventional" to "advanced" biofuels with a lower risk of indirect land use changes,
    - the reduction of the greenhouse gas intensity of biofuels, and
    - an improved reporting procedure for the estimated greenhouse gas emissions as a result of indirect land-use changes.

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- **Limiting "conventional" biofuels**
  - "Conventional" biofuels are produced by food plants, in particular from starch containing crops such as cereals and maize, and from sugar and oil crops.
  - They pose a serious risk of increasing greenhouse gas emissions through indirect land-use changes.
  - Only a maximum of half (five percentage points) of the 10% expansion target for renewable energies may be achieved by means of conventional biofuels (new Art. 3 (4) lit. d DIR 2009/28/EC).

- **Encouraging "advanced" biofuels**
  - "Advanced" biofuels are produced using raw materials of low economic value.
  - They bear a low risk of increasing greenhouse gas emissions through indirect land-use changes.
  - Advanced biofuels are given more weighting when calculating if the 10% expansion target for renewable energies in the transport sector is being achieved (new Art. 3 (4) lit. e DIR 2009/28/EC):
    - biofuels e.g. from algae, animal manure and sewage sludge or mixed municipal waste shall be considered to be four times their energy content (new Annex IX Part A DIR 2009/28/EC);
    - biofuels e.g. from used cooking oil or animal fats shall be considered to be twice their energy content (new Annex IX Part B RL 2009/28/EC).

    To calculate the 10% expansion target, the amount of energy in the used fuels is decisive. By calculating a multiple of their actual energy content, the 10% target is achieved faster. The higher the share of advanced biofuels is, the lower are the resulting greenhouse gas emissions.

- **Reducing greenhouse gas emissions through biofuels**

  Biofuels must – without taking into account indirect land use changes – achieve the following minimum savings in greenhouse gas emissions if they are to be counted in meeting the 10% target for renewable energies and the 6% reduction target for greenhouse gas intensity of biofuels (amended Art. 17 (2) DIR 2009/28/EC; amended Art. 7b (2) DIR 98/70/EC):
  - Biofuels from installations put into operation by 1 July 2014:
    - at least 35% by 31 December 2017
    - at least 50% as of 1 January 2018
  - Biofuels from installations put into operation after 1 July 2014: at least 60%.

- **Reporting on greenhouse gas emissions as a result of indirect land-use changes**
  - Fuel suppliers must report by 31 March at the latest and annually the estimated greenhouse gas resulting from indirect land-use changes. Member States must report such data to the Commission. (New Art. 7a (6) in conjunction with new Annex V DIR 98/70/EC)
  - As of 31 December 2011, Member States must submit a report on the development of renewable energies (Art. 22 (1) DIR 2009/28/EC) every two years. When calculating greenhouse gas emission savings from the use of biofuels, they must add the standardised estimates for indirect land-use change emissions (amended Art. 22 (2) in conjunction with the new Annex VIII DIR 2009/28/EC).

Key Changes to the Status quo

- To date, energy from conventional biofuels has counted fully towards meeting the 10% expansion target for renewable energies in the transport sector. From now on, only a maximum of 50% will be counted.
- Until now, advanced biofuels have not been given greater weighting when calculating the 10% target for renewable energies in the transport sector; in future, they will be.
- To date, biofuels have had to show at least a 35% saving in greenhouse gas emissions in order to count towards the 10% expansion target for renewable energies in the transport sector and the 6% reduction target for the greenhouse gas intensity of fuels. In future, biofuels from installations put into operation before 1 July 2014 will have to save at least 50% of greenhouse gas emissions as of 2018, and biofuels from installations put into operation after 1 July 2014 will have to show at least a 60% saving in greenhouse gas emissions.
- In future, greenhouse gas emission resulting from indirect land-use changes will have to be taken into account in the reports on emissions savings from biofuels.

Statement on Subsidiarity by the Commission

Both the Renewable Energy Directive 2009/28/EC and the Fuels Quality Directive 98/70/EC aim to reduce greenhouse gas emissions in the EU, amongst other things by establishing an EU-wide market for sustainable biofuels. According to the Commission, the related risk of indirect land-use changes, which "necessarily have transnational aspects", cannot be addressed by individual Member States but at EU level only. (p. 5)

Policy Context

The EU committed itself to reduce its greenhouse gas emissions by 2020 by 20% compared to 1990s levels, to increase the share of renewable energies in the total EU energy consumption by up to at least 20% and increase their energy efficiency by 20%. Moreover, by 2020 each Member State must ensure that the share of biofuels in transport-related fuel consumption is at least 10% ("20-20-20 Decision"; see cepKompass, p. 10 et sqq., in German only). The biofuels used for this must not be produced from resources derived from areas with a high level of biological diversity or high carbon stock (wetlands, forests) ("sustainability criteria", Art. 17 DIR 2009/28/EG and Art. 7b DIR 98/70/EC). Pursuant to its obligation (Art. 17 DIR 2009/28/EC and Art. 7b DIR 98/70/EC), the Commission has submitted a report analysing the impact of indirect land-use changes on greenhouse gas emissions and the possibilities for reducing them. According to this report, the greenhouse gas emissions caused by indirect land-use changes can only be estimated very roughly, so they should be avoided by means of a "preventive strategy" [Communication COM(2010) 811, p. 15]. The present Amendment Directive serves this purpose.

Legislative Procedure

17 October 2012	Adoption by the Commission
Open	Adoption by the European Parliament and the Council, publication in the Official Journal of the European Union, entry into force

Options for Influencing the Political Process

Leading Directorate General:	DG Energy
Committees of the European Parliament:	Environment, public health and food safety (in charge), rapporteur: Corinne Lepage (ALDE Group, FR);
Committees of the German Bundestag:	Environment, nature conservation and nuclear safety (in charge);
Responsible German Federal Ministries:	Environment, Economics
Decision mode in the Council:	Qualified majority (adoption by a majority of Member States and with 255 of 345 votes; Germany: 29 votes)

Formalities

Legal competence:	Art. 114 (Internal Market) and Art. 192 TFEU (Environment)
Form of legislative competence:	Shared competence (Art. 4 (2) TFEU)
Legislative procedure:	Art. 294 TFEU (ordinary legislative procedure)

ASSESSMENT

Economic Impact Assessment

The share of renewable energies in the energy mix of Member States and, in particular, in the transport area should not be determined through political decisions but by market forces whilst taking into consideration appropriate climate policy tools. With the Emissions Trading Scheme (EU ETS),
the EU already has an instrument with which a politically prescribed reduction in CO2 emissions can be achieved accurately across sectors. So far, of the transport modes only electrical rail transport and air transport have been integrated into EU ETS. Consequently road transport should also be included. However, the EU decided otherwise years ago. Therefore this assessment is set against the background of the current state of law.
The use of biofuels only has a climate-protecting effect if the combustion of fossil fuels is really prevented as a result. However, according to all forecasts, the worldwide demand for fossil fuels is set to increase in the foreseeable future so that any fossil fuels that remain unused in the EU will soon find buyers outside Europe. Along with the greenhouse gas emissions from fossil fuels, the greenhouse gas emissions from the use of biofuels must also be included in the worldwide emissions balance. This includes for instance the fossil fuel energy used for producing biofuels and the release of nitrous oxide resulting from fertilising agricultural land. Moreover, greenhouse gas emissions from indirect land-use changes must be taken account of, for instance where new agricultural land is made available for the cultivation of food plants through clearing.

By definition, *indirect* land-use changes cannot be directly observed [see also the impact assessment document SWD(2012) 343, p. 12], as land-use changes can be triggered by a complex string of causal factors. Therefore, the related greenhouse gas emissions can only be estimated but not measured exactly. However, **since** experience has shown that **indirect land-use change**, in particular in the case of biofuels outside Europe, **is a phenomenon relevant to climate policy, their inclusion in the greenhouse gas balance of biofuels is principally appropriate**.

By limiting how much conventional biofuels count to five percentage points of the 10% expansion target, Member States have only a limited incentive to promote the use of conventional biofuels. This upper limit corresponds roughly to the current share of biofuels in the EU. By employing conventional biofuels beyond this limit, in future Member States can no longer comply with their obligations under EU law.

The Commission assumes that compared to fossil fuels, conventional biofuels from palm oil, soybeans and rapeseed even lead to increased greenhouse gas emissions [see Impact Assessment SWD(2012) 343, p. 26 et sqq.]. Therefore, on the one hand the Commission should – from a climate policy standpoint – have proposed putting an end to including at least these conventional biofuels in the calculations. On the other hand, however, companies have only invested in the production of biofuels because the EU and Member States have set the relevant incentives. Phasing-out the promotion of biofuels would therefore subsequently devaluate politically motivated investments. **Limiting the extent to which conventional biofuels count to five percentage points of the 10% target** mainly affects future investments. Therefore, this limitation **is justifiable as a means to partially correct political shortcomings**.

The priority weighting of advanced biofuels sets incentives to Member States, in particular to promote the use of biofuels. However, this would in fact entail a reduction of the 10% target, since the share of biofuels would be calculated artificially higher than it actually is.

Raising the target for direct greenhouse gas emissions savings through biofuels to 50% or 60% if these are to be counted towards the 10% expansion target and the 6% reduction target reduces the use of greenhouse gas intensive biofuels. Although these requirements do not take account of indirect land-use changes, , the stricter requirements regarding direct greenhouse gas emissions must be seen as a pragmatic approach, as a direct connection between the production of a certain biofuel and indirect land-use changes cannot be proved in each case.

The increased use of advanced but more expensive biofuels is resulting in a gradually increase of fuel prices in the EU. Should the more expensive biofuels be subsidised by the Member States, this would increase the tax burden under otherwise similar conditions; both would have a negative impact on growth and employment.

Legal Assessment

Competence

Unproblematic. The EU may adopt environmental policy measures to protect the climate (Art. 192 TFEU). Moreover, uniform rules on biofuels throughout the EU serve to ensure the smooth functioning of the internal market (Art. 114 TFEU).

Subsidiarity

Unproblematic. Indirect land-use changes as a result of cultivating resources for biofuels can occur across borders, so it makes sense that countermeasures are taken not by Member States alone but at EU level.

Proportionality

Unproblematic.

Compatibility with EU Law

Unproblematic.

Compatibility with German Law

Unproblematic.

Conclusion

The indirect changes in land-use as a result of cultivating plants to produce biofuels is a phenomenon relevant to climate policy. Therefore, it is principally appropriate that biofuels be included in the calculations when assessing the greenhouse gas emissions balance of biofuels. Limiting the extent to which conventional biofuels count to half of the 10% expansion target is justifiable as a partial correction of political shortcomings.