

THE SWEDISH CENTRE FOR RENEWABLE TRANSPORTATION FUELS

DIRECTIVE ON THE PROMOTION OF THE USE OF ENERGY FROM RENEWABLE SOURCES

PROPOSED CHANGES TO THE RENEWABLE ENERGY DIRECTIVE

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On November 30th, 2016, the European Parliament, as part of its so called Winter Package¹, issued a proposal for an update of the directive on the promotion of the use of energy from renewable sources (the Renewable Energy Directive, RED). The update of this directive, often refered to as RED II, is still a proposal and is going through the legislative process, where the text will be negotiated, before finally being adopted and the directive will be entered into force.

f3, the Swedish Knowledge Centre for Renewable Transportation Fuels, main purpose is to develop and communicate scientifically based knowledge about renewable transportation fuels and their sustainability. Thus, the parts of the RED II relevant for the development and regulation of renewable transportation fuels, and the extent to which these have been altered, compared to the former RED have been compiled.

Major changes from former RED

The RED launched in 2009 established an overall policy for the production and promotion of energy from renewable sources in the EU. For the transport sector, all EU countries must ensure that at least 10% of their transport fuels come from renewable energy sources by 2020. The directive also introduced a European sustainability criteria for renewable transportation fuels. The RED was later, after extensive debate, complemented by the so called iLUC directive in 2015, in order to address indirect land use change emissions and to prepare the transition towards advanced biofuels. Below, the main changes in the proposed RED II, compared to the former directives, are summarized:

Article 3

The target for 10% renewable energy in the transportation sector (RES-T) is removed after 2020. This means that there is no specific target for the transportation sector after this date, instead the

¹ The Winter Package, or the Clean energy for all Europeans package, also includes revised versions of the Energy Efficiency Directive, the Energy Performance of Buildings Directive, recasts of the Internal Electricity Market Directive (and Regulation) and the ACER Regulation as well as proposals for a Regulation of Risk-Preparedness in the Electricity Sector and Repealing the Security of Supply Directive, and for a Regulation on the Governance of the European Union.

total target for the renewable energy share of 27% in gross final consumption by 2030 is to be met by a non-defined combination of measures within all energy sectors (electricity, heating and cooling, and transportation). The target is a union-wide target. However, each Member State must attain a minimum national share of renewable energy in gross final consumption as set by the earlier national commitments (corresponding to 10-49% in 2020 and also listed in Annex I).

Article 7

The cap on biofuels and bioliquids produced from food or feed crops², introduced through the iLUC directive in 2015, is gradually reduced from 7% of final consumption of energy (as per Member State) in 2021 in road and rail transport, to 3.8% in 2030, following the trajectory set out in Annex X. Member States may, however, set a lower limit and may also distinguish between different types of biofuels, bioliquids and biomass fuels, for instance by setting a lower limit for biofuels produced from oil crops. To count towards the renewable energy targets the contribution of biofuels, bioliquids and biomass fuels must meet further sustainability and greenhouse gas (GHG) emission saving criteria.

Article 16

An establishment of a permit granting process for (all) renewable energy projects with one designated authority ("one-stop-shop") to reduce complexity and increase efficiency and transparency. Also, a maximum time limit for the permit granting process is set.

Article 25

An EU-level obligation is established for fuel suppliers to provide a certain share of low-emission and renewable fuels, including advanced biofuels and other biofuels and biogas produced from feedstock listed in Annex IX, renewable electricity, renewable liquid and gaseous transport fuels of non-biological origin, and waste-based fossil fuels.

- The share of low-emission and renewable fuels should be at least equal to 1.5% in 2021 and 6.8% in 2030.
- The switch to advanced biofuels is promoted by a specific sub-mandate, within which their yearly contribution should be at least 0.5% in 2021, and increase to reach at least 3.6% by 2030. Advanced biofuels are defined as being produced from feedstock listed in Part A of Annex IX.
- The share of biofuels produced from organic wastes and residues with mature technologies, as included in Annex IX Part B, is capped to 1.7%.
- The 6% life-cycle GHG emission reduction target is not continued after the end of 2020 and the RED II would not directly amend the FQD (Fuel Quality Directive).
- Member States shall put in place national databases that ensure traceability of fuels and mitigate the risk of fraud.

Article 26

The existing EU sustainability criteria is reinforced and extended to biomass used also for other bioenergy purposes than transportation fuel, i.e. for heating/cooling and electricity production.

- Streamlining of the sustainability criterion applying to agricultural biomass (to reduce the administrative burden).
- Stricter criterion for peatland protection.
- Introduction of a new risk-based criterion for forest biomass. According to this, woody raw material should come only from forests that are harvested in accordance with the principles of sustainable forest management. Operators should take the appropriate steps in order to minimize the risk of using unsustainable forest biomass for the production of bioenergy.

² Starch-rich sugars and oil crops produced on agricultural land as a main crop excluding residues, waste or lignocellulosic material.

- The country of origin of the forest biomass must meet LULUCF (Land Use, Land-Use Change and Forestry) requirements set according to decisions adopted under the United Nations Framework Convention on Climate Change (UNFCCC) and Paris agreements.
- Increased requirements for GHG saving performance to 70% for new plants for biofuels for transportation (80% for biomass-based heating/cooling and electricity only above 20 MW). These thresholds are a prerequisite for public support and inclusion in the fulfilling of renewable energy targets and obligations. Existing support schemes for biomass-based electricity should however be allowed until their due end date for all biomass installations.
- The sustainability criteria and the greenhouse gas emission criteria should apply regardless
 of the geographical origin of the forest and agricultural biomass.

Article 27

Article 27 provides a clarification on the mass balance system and adaption to cover biogas codigestion and injection of biomethane in the natural gas grid.

Annex V

Default values for GHG emission savings for biofuels and bioliquids in the Annex V are updated. For more mature biofuels (such as ethanol and biodiesel based on food and feed crop), these values have, in general, increased compared to former default values. For future biofuels, the default values are instead, in general, slightly decreased. For all biofuels, a more detailed division upon different biofuel production pathways are provided. Biogas is moved to Annex VI.

Annex VI

A new Annex VI is added to cover a common GHG accounting methodology for biomass fuels for heat and power (as well as biomethane for transport), including default values for GHG emission savings.

Annex IX

In Annex IX the feedstocks (mainly for advanced biofuels) which should be considered for meeting the new fuel-suppliers' obligation target are listed. New to the list in Part B is molasses. Every two years the Commission shall evaluate the feedstocks listed in the Annex allowing for the possibility to add but not remove feedstocks from the list.

Titles and references on the directives and the RED II proposal:

The current RED: Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. (Link: http://data.europa.eu/eli/dir/2009/28/oj)

The proposed update, "RED II": Proposal for a Directive of the European Parliament and the of the Council on the promotion of the use of energy from renewable sources (recast) (COM/2016/0767 final/2 – 2016/0382 (COD) (Link: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016PC0767R(01))

The "iLUC Directive": Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 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 (Link: http://data.europa.eu/eli/dir/2015/1513/oj)