

New Regulative Framework in the EU (RED II) – Opportunities for Latin America



The RED II was approved by the European Parliament in November and came into effect on 24 December 2018

| RED II (Directive 2018/2001) | |
|---|---|
| Energy from Renewable Sources | 32 % (at EU level) |
| Renewables in the Transport Sector | 14% |
| Blending Obligation for Low-Emission and Renewable Fuel | To translate the 14%, obligation can be in energy, volume or by GHG reduction |
| Cap on Food/ Feed Crop Based Biofuels | 2020 consumption level for each MS within a 7% limit, with 1% flexibility |
| Target for Annex IX Part A (advanced) | 0.2 % (2022) 1 % (2025) 3.5 % (2030) |
| Limit for Annex IX Part B (UCO, animal fat) | Limit of 1.7%, which can be modified by MS if approved by Commission |



Additional fuel categories will be introduced by RED II

Advanced biofuels

High iLUC risk biofuels

Low iLUC risk biofuels

Renewable fuels of non-biological origin

Recycled carbon fuels



New categories will require sustainability certification – ISCC is prepared to cover these new categories as well

Advanced biofuels

· Annex IX (A) of RED II

High iLUC risk biofuels

Low iLUC risk biofuels

Defined in COM DRAFT delegated act from 8 Feb 2019

Renewable fuels of nonbiological origin

E.g. renewable hydrogen

Recycled carbon fuels

 Fuels produced from e.g. plastics, waste processing gases, exhaust gases



Also under RED II, categorisation will have implications with respect to EU market access, certification and GHG calculation

Advanced biofuels

- Sub-quota of 3.5% (Part A)
- 1.7% (Part B) but exemptions possible

High iLUC risk biofuels

- 0% by 2030!
- Further definition in delegated act

Low iLUC risk biofuels

 Food/feed crops which are categorized as high iLUC can continue to be used if certified as low iLUC

Renewable fuels of nonbiological origin

Directly 70% GHG savings required

Recycled carbon fuels

 Counted only for 14% transport target, not for overall renewable energy target. GHG methodology and savings still to be defined



Annex IX defines advanced feedstocks and fuels. Can be updated by the European Commission

Annex IX

Part A ("Advanced") targets: at least 0.2% in 2022, 1% in 2025 and 3.5% in 2030

- Algae if cultivated on land in ponds or photobioreactors
- Biomass fraction of mixed municipal waste but not separated household waste subject to recycling targets
- Bio-waste as defined in Article 3(4) of Directive 2008/98/EC from private households subject to separate collection
- Biomass fraction of industrial waste not fit for use in the food/feed chain, including material from retail/ wholesale and the agro-food and fish and aquaculture industry, excluding feedstocks listed in part B
- Straw
- · Animal manure and sewage sludge
- Palm oil mill effluent and empty palm fruit bunches
- Tall oil pitch

- Crude glycerine
- Bagasse
- Grape marcs and wine lees
- Nut shells
- Husks
- Cobs cleaned of kernels of corn
- Biomass fraction of wastes and residues from forestry and forestbased industries, i.e. bark, branches, pre-commercial thinnings, leaves, needles, tree tops, saw dust, cutter shavings, black liquor, brown liquor, fibre sludge, lignin and tall oil
- Other non-food cellulosic material
- Other ligno-cellulosic material (...) except saw logs and veneer logs

Part B (Not considered as "advanced") capped to 1.7% but exemption possible

Used Cooking Oil (UCO)

 Animal fats classified as categories 1 and 2 in accordance with Regulation (EC) No 1069/2009

Source: RED II (Directive 2018/2001)



New Greenhouse Gas (GHG) Emission Saving Thresholds and New Fossil Fuel Comparator

- New GHG emission saving thresholds:
 - 50% (old installations)
 - 60% for new installations in operation after 5 October 2015
 - 65% for installations operating after 1 January 2021
 - From 1 January 2021 onwards 70% for Renewable Fuels of non-biological Origin
- New Fossil fuel comparator set at 94 instead of 83.8 gCO2eq/MJ



"Novel Fuels"

Renewable Liquid and Gaseous transport fuels of non-biological origin (RFNBOs):

- Liquid or gaseous fuels used for transport whose energy content comes from renewable energy sources other than biomass (e.g. Power-to-X such as hydrogen made from renewable electricity)
- UK is first "Member State" including RFNBOs in existing national legislation already
- UK has introduced the category "development fuels": advanced waste and residues (not including UCO or tallow), RFNBOs, renewable hydrogen, renewable aviation fuel, bio substitute natural gas

Recycled Carbon Fuels (RCFs):

 Liquid or gaseous fuels that are produced from non-renewable waste streams (e.g. waste plastics, flue gas)



Next steps in the RED II Process

- Transposition of the Directive by the EU Member States is due by 30 June 2021
- Several delegated acts by the European Commission necessary
 - Low/high ILUC risk biofuels (draft version published on 08 February 2019)
 - GHG methodology for renewble fuels of non-biological origin and recycled carbon fuels
 - Co-processing
 - Update of Annex IX
- Commission shall ensure that a Union database is put in place to enable the tracing of liquid and gaseous transport fuels (no timeframe defined)



Opportunities for Latin American producers

RED II:

- High overall target for renewables in transport
- Market for Annex IX (Part A and B) fuels
- CPO and PME exports to continue in the next years
- Low iLUC certification of palm oil from formerly unused land
- Low iLUC potential from smallholders
- Low iLUC potential from yield increases
- Targets for advanced biofuels and new options for RFNBOs and recycled carbon fuels





Thanks for your attention!

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