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Information Session Australia-Germany Energy Partnership| 14 March 2023

Delegated act on criteria for renewable hydrogen

Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

Jan Wegener | Team Leader Europe

RED II – 30 Nov '16:

Publication „winter package"
(Clean energy for all Europeans)

RED II – 14 Jun '18:

Political agreement *by Council and EP*

RED II – 21 Dec '18:

Official publication RED II

RED II – 13 Nov '18:

Adoption by EP

RED II 4 Dec '18:

Adoption by Council

20 Feb '20:

Official start of work on DA 27

21 Dec 20:
German transposition of RED II in *37. BImSchV*

Jan '21:

1st leak on DA 27

RED III – 14 Jul '21:

Publication *Fit for 55* package

RED II – 31 Dec '21:

Deadline Publication DA 27

RED II – May '22:

2nd leak on DA 27

RED III – 18 May '22:

REPowerEU Plan

RED II – Nov '22:

3rd Leak on DA 27

RED II – 17 Jun '22:

End of public consultation on DA 27

RED III – 7 Feb '23:

Boycott of trilogue by EP

RED II – 10 Feb '23:

Adoption DA 27

2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023

DELEGATED ACTS

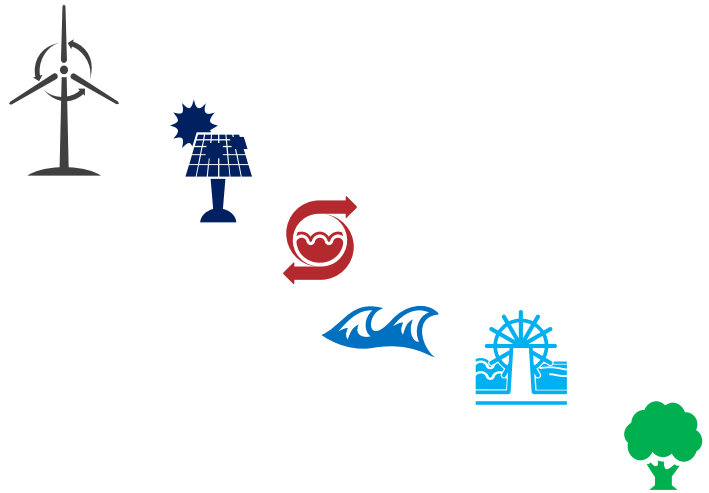
- **Designed and adopted by the European Commission** based on articles 290 and 291 of the Treaty on the Functioning of the European Union:
  - „supplement or amend certain **non-essential elements** of the legislative act“
  - No vote of the co-legislators (European Parliament and Council) necessary
  - Empowerment of Commission can be withdrawn at any time by Council or Parliament with **qualified majority**
- Supported by an expert committee (comitology): **Expert Group on Renewable Fuels**
- **Entry into force** after two months, which can be prolonged by another two months by the co-legislators
  → Extension of 2 months by EP: publication at the earliest on 10 June 23

RENEWABLE ENERGIES, RFNBOS AND TRANSPORT IN RED II

According to Art. 2 (1) RED II

RE = Energy from renewable non-fossil sources,

- Wind
- Solar (solar thermal and solar photovoltaic)
- Geothermal energy
- Ambient energy
- Tide, wave and other ocean energy
- Hydropower,
- Biomass, landfill gas, sewage treatment plant gas, and biogas



RFNBOs ‘renewable liquid and gaseous transport fuels of non-biological origin’ =
liquid or gaseous fuels which are used in the transport sector other than biofuels or biogas, the **energy content** of which is derived from renewable sources **other than biomass**

Art. 25 – Mainstreaming renewable energy in the transport sector
obligation on fuel suppliers to ensure share of RE in transport is at least 14 % by 2030

ACCOUNTING FOR RENEWABLE HYDROGEN

Extant possibilities according to art. 27, RED II

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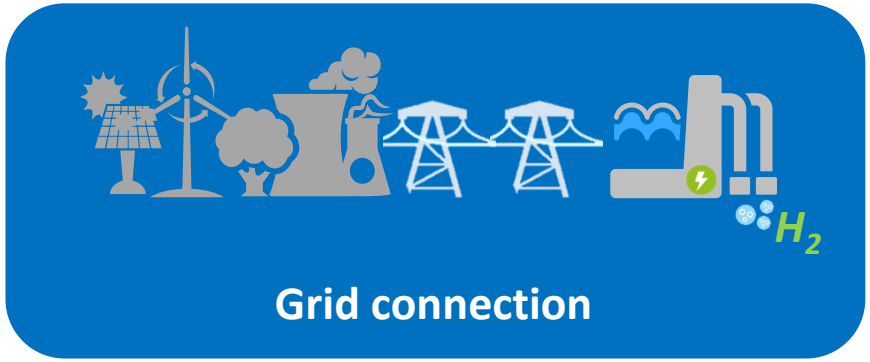
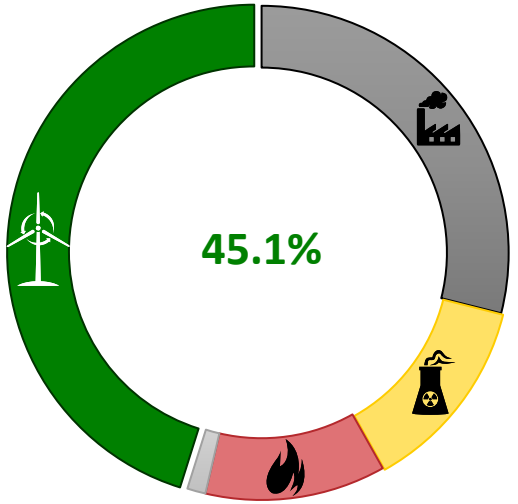
- **Partly counting renewable H2:**
  in case of a grid connection accounting using the **average share of electricity from renewable sources** in the country of production, as measured **two years before** the year in question



- **Fully counting renewable H2:**
  - Direct connection between RE and electrolyser (no grid connection), if RE installation in operation **after or at the same time** as electrolyser
  - Connected to the grid but no electricity used from the grid and evidence of renewable electricity claimed only once

German energy mix in 2021



DIRECT CONNECTION

Rules for counting electricity obtained from direct connection to an installation generating renewable electricity as fully renewable

- Direct line or same installation
- Grid connection but **smart meter** proving no electricity taken from the grid
- RE installations came into operation not earlier than **36 months before** electrolyser

GRID CONNECTION

SHARE OF RE IN BIDDING ZONE

- Fuel production in bidding zones with **>90% average share renewable electricity** in the previous calendar year
- Hours of fuel production does not exceed production of a **maximum number of hours** set in relation to the proportion of renewable electricity in the bidding zone

EMISSION INTENSTY IN BIDDING ZONE

- GHG intensity **<18 gCO2eq/MJ**
- Power purchase agreement (**PPA**) with renewable electricity covering the amount used for fuel production
- Conditions of **temporal and geographical correlation** are met

IMBALANCE SETTLEMENT

- RE installations were redispatched downwards
- electricity for fuel production reduced the need for redispatching by the same amount

ADDITIONALITY

Criteria proving additional production of renewable energies

Own installations or PPAs with the following criteria

- RE installations came into operation not earlier than **36 months before** electrolyser
- **No investment aid**, exceptions:
  - Aid received before repowering
  - Research, testing and demonstration
  - No ‘net support’
- Transitional phase: electrolysers having come into operation before **1 January 2028** do not have to meet these criteria until **1 January 2038**

TEMPORAL CORRELATION

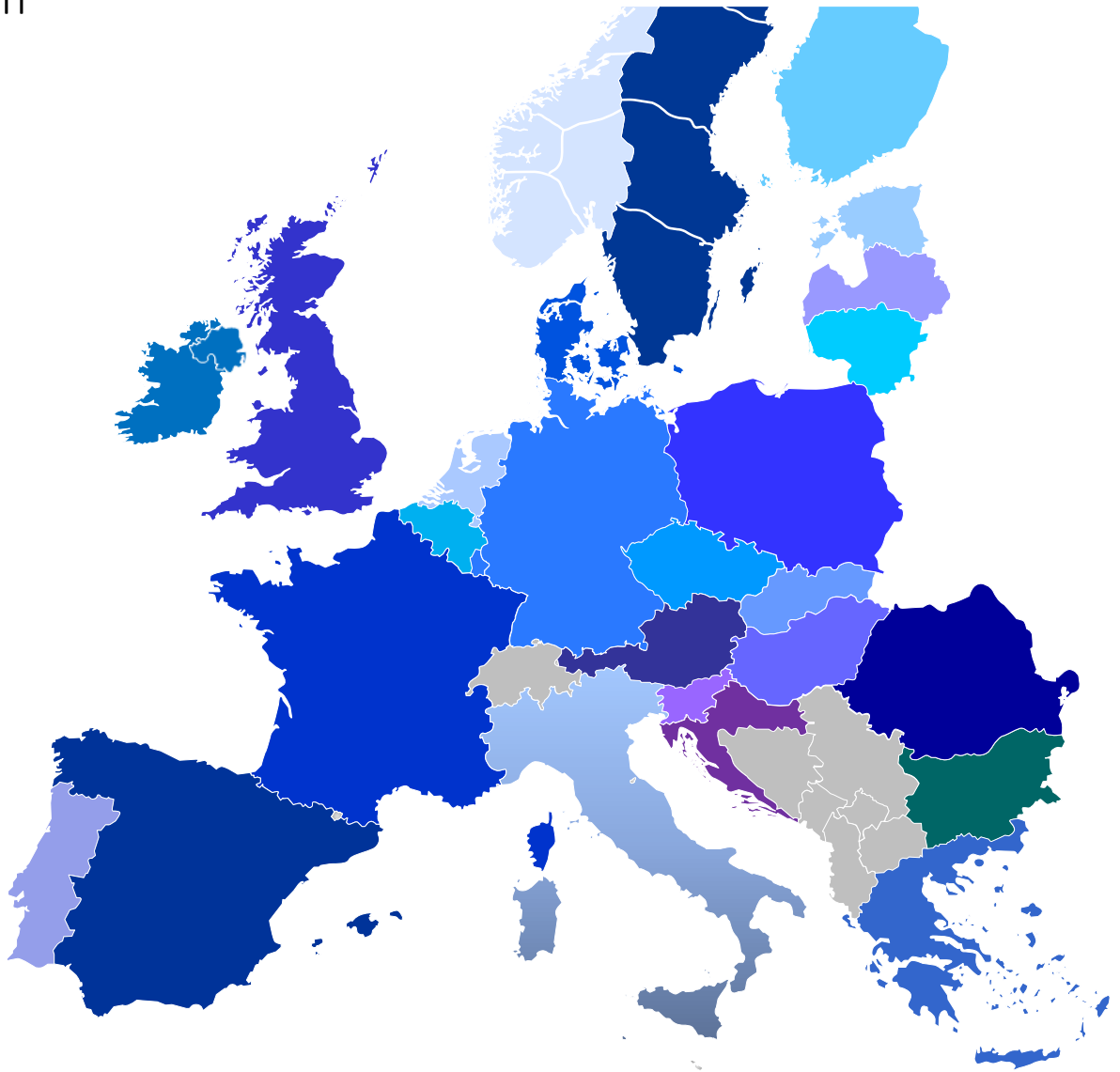
‘Parallel’ production of renewable electricity and fuel

- Until 31 December 2029: fuel production and electricity of fuel and renewable electricity (under a PPA or storage asset behind same network connection point) in the **same calendar month**
- From 1 January 2030 (2027): production of fuel and renewable electricity (under a PPA or storage asset behind same network connection point) **same hour**
- **Always complied with, if in a one-hour-period:**
  - Clearing price of electricity (day-ahead market coupling):
    - **≤ 20 €/MWh** or
    - **0.36 * Price for an ETS allowance in t/CO_2eq**

GEOGRAPHICAL CORRELATION

Criteria proving geographical closeness of production

- Electrolyser and RE installation in the **same** bidding zone
- RE installation in an **interconnected** bidding zone, if:
  - Electricity prices in the relevant time period on the day-ahead market are higher than in the bidding zone where the fuel is produced
  - Interconnected bidding zone is an offshore bidding zone
- (possible additional criteria set by Member States)



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