

Rules for producing renewable fuels of non-biological origin - RFNBO

Renewable hydrogen is one of the fuels considered an RFNBO if it is produced through specific methods, directly connected installations or grid connected installations. 5 specific production routes can be identified from the recently published delegated acts by the European Commission.

1. Direct connection between renewable energy and RFNBO production



- The renewable energy installation unit came online no earlier than 36 months before the RFNBO production facility
- Production and consumption take place within the same installation or are directly connected
- The RFNBO production facility does not utilize grid power even if grid connected

2. There are four grid connected RFNBO production routes, with varying conditions

2.1. The RFNBO producer follows principles that ensure the electricity used via the grid is renewable:

ADDITIONALITY

The renewable energy generation installation came online not earlier than 36 months before the RFNBO production facility and the facility does not consume more electricity than contracted via PPA or self-generated.

The renewable energy installation has not received operating or investment aid.

Exemption: if the RFNBO production facility came online before 1.1.2028, the producer is exempt from this clause until 1.1.2038 or indefinitely if production methodology under 2.2 or 2.3 is applied.

TEMPORAL CORRELATION

RFNBO production takes place during the same calendar month as contracted renewable energy generation until 31.12.2029 and during the same hour thereafter.

Temporal correlation can be buffered via storage behind the same network point.

Extra compliance routes: day-ahead price is <20 €/MWh or $<0,36$ x emission allowance.

GEOGRAPHICAL CORRELATION

Renewable energy installation and the electrolyzer are in the same bidding zone

Renewable energy is located on an interconnected bidding zone where the day-ahead price is equal or higher than the interconnected bidding zone with RFNBO production

Renewable energy is on an offshore bidding zone connected to the zone with RFNBO production

2.2. The proportion of renewable energy exceeded 90% during last year



- No additional renewable capacity must be built (additionality exemption)
- Applies to the bidding zone where RFNBO production takes place for the next five calendar years
- Exemption to temporal and geographical correlation rules
- RFNBO production full load hours $< 8760h \times$ renewable energy share

2.3. The power grid is sufficiently decarbonized



- Emission intensity of the bidding zone grid is below the value of 18 gCO₂eq/MJ.
- No additional renewable capacity needs to be built but renewable energy needs to be contracted via PPA
- Temporal and geographical correlations apply
- In force for 5 years if the threshold is reached

2.4. The RFNBO production facility improves grid stability



- RFNBO producer can prove with the help of the national TSO that during an imbalance settlement period (nation dependent):
 - Power-generating installations using renewable energy sources were redispatched downwards
 - The electricity consumed for RFNBO production reduced the need for redispatching by a corresponding amount

The delegated acts are subject for revision in 2028, when their impact is further assessed by the European Commission.