



ewaba

European Waste-based & Advanced Biofuels Association

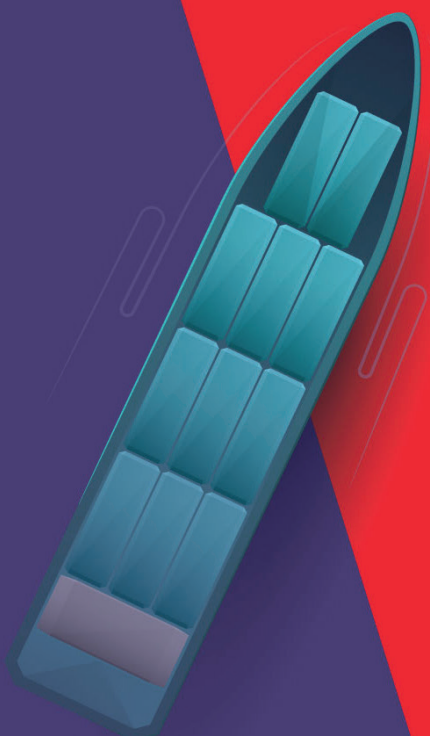


Regulatory briefing

RED III REFUELEU AVIATION FUELEU MARITIME

Overview of the main provisions
of relevance for waste-based
and advanced biodiesel

May 2024



REDIII

Overview of the main provisions



Overall renewable energy target

(Article 3 Paragraph 1)*

Member states shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy **in 2030 must be at least 42,5 %**.

Member States shall collectively endeavour to **increase** the share of energy from renewable sources in the Union's gross final consumption of energy **(on voluntary basis) in 2030 to 45 %**.

Renewable energy transport target

(Article 25 Paragraph 1 (a))

Each Member state shall set an obligation on fuel suppliers to ensure that the amount of renewable fuels and renewable electricity supplied to the transport sector leads **to a share of renewable energy within the final consumption of energy in the transport sector of at least 29 % by 2030**; or to a **greenhouse gas intensity reduction of at least 14,5 % by 2030**, in accordance with an indicative trajectory set by the Member State.

Member States shall report on the share of renewable energy within in the transport sector, including to the maritime mode, as well as on the greenhouse gas intensity reduction.

Recycled carbon fuels might be taken in account for the calculation of the target if their GHG savings are at least 70%.

For the calculation of the RES-T also the energy supplied to maritime transport shall be included, but limited to 13% (Cyprus and Malta 5%). (Article 27 Paragraph 5).

Annex IXB biofuels

(Article 27 Paragraph 1(c)(iv), Paragraph 2(f))

Limited to **max. 1,7%** (except for Cyprus and Malta).

Member States may increase the limit taking into account the availability of feedstock and subject to approval by the Commission (Article 27 Paragraph 1. (d) second subparagraph), Paragraph 2.(I) second subparagraph)).

The Commission is empowered to adopt delegated acts by adapting the limit on the share of biofuels and biogas produced from the **feedstock listed in Part B of Annex IX** on the basis of an assessment of the availability of feedstock. The limit shall be at least 1.7% (Article 27 Paragraph 3).

The combined share of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and of renewable fuels of non-biological origin

(Article 25 Paragraph 1(b))

At least 1 % in 2025 and 5,5 % in 2030, of which a **share of at least 1 % should be RFNBOs in 2030**.

Member States are encouraged to set differentiated targets for biofuels and biogas produced from the feedstock listed in Part A of Annex IX and renewable fuels of non-biological origin **at national level**.

Member States with maritime ports shall endeavour to ensure that as of 2030 the share of RFNBOs in the total amount of energy supplied to the maritime sector is at least 1.2%.

REDIII

Overview of the main provisions



If the list of feedstocks set out in Part A of Annex IX is amended, Member States may increase their minimum share of advanced biofuels sector accordingly.

RFNBOs used as intermediate product for the production of conventional fuels or biofuels shall be taken in account.

Multipliers

(Article 27 Paragraph 2)

The share of Annex IX biofuels and RFNBOs shall be considered to be twice its energy content (Paragraph 2 (e)).

The share of renewable electricity shall be considered to be four times its energy content when supplied to road vehicles and may be considered to be 1,5 times its energy content when supplied to rail transport (Paragraph 2(d)).

The share of advanced biofuels and biogas produced from the feedstock listed in **Part A of Annex IX supplied in the aviation and maritime modes shall be considered to be 1,2 times their energy content** and the share of RFNBOs supplied in the aviation and maritime modes shall be considered to be 1,5 times their energy content (Paragraph 2(i)).

Food and feed crops biofuels

(Article 26 Paragraph 1)

No more than 1% higher than the share in the final consumption of energy in the transport sector in 2020 in a Member State, but **maximum of 7 %**.

High Indirect Land Use Change (ILUC) Risk biofuels

(Article 26 Paragraph 2)

For the time being **just palm oil is qualified and shall be reduced to 0 by 2030**.

By 1 September 2023 (and every 3 years thereafter) the Commission shall review and amend the criteria for high ILUC risk biofuels via a delegated act, and to include a trajectory to gradually decrease their contribution. The review shall be based on a revised version of the report on feedstock expansion, which shall, in particular, assess whether the threshold on the maximum share of the average annual expansion of the global production area in high carbon stock should be reduced.

B10 biodiesel blend

(Recital 99)

Enabled but B7 protection grade obligatory.

Review clause

(Article 33 Paragraph 3)

By **31 December 2027**, the Commission shall submit a **legislative proposal** on the regulatory framework for the promotion of energy from renewable sources for the **period after 2030**.



REFUELEU AVIATION

Overview of the main provisions



Scope of the Regulation

Scope: Union airports and commercial air transport flights (Article 2).

Union airport: passenger traffic higher than 800.000 passengers or freight traffic higher than 100.000 t in the previous reporting period (1 year) and that are not in the outmost regions (Article 3 Paragraph 1).

Commercial air transport flight: Flight operated for the purposes of transport of passengers, cargo or mail for remuneration or hire, including business aviation flights for commercial purposes (Article 3 Paragraph 4).

Exemptions: MS can decide to include also the exempted airports, operators can include other than commercial flights.

Methodology for target calculation

(Article 10)

The **amount of aviation fuel and SAF** supplied at each Union airport, for each type of fuel, **expressed in tonnes** (Article 10 (a)(b)).

Reported each year by 14 February, **first time in 2025**.

Sustainable aviation fuels (SAF) definition

(Article 3 Paragraph 7)

Synthetic aviation fuels – renewable fuels of non biological origin (RFNBOs) (Article 3 Paragraph 12) – produced from renewable or nuclear energy, **or**

Aviation biofuels – advanced biofuels or biofuels produced from Annex IXB feedstock or other biofuels which comply with the sustainability and lifecycle emission savings criteria according to REDII with the exception of biofuels produced from “food and feed crops” (Article 3 Paragraph 8), **or**

Recycled carbon aviation fuels.

Limitations

Aviation biofuels other than advanced biofuels and Annex IXB biofuels – max. 3% of aviation fuels (Article 4 Paragraph 4).

Excluded feedstocks (shall not apply to any feedstock included or to be included within the upcoming revision of Annex IX of RED) – food and feed crops, intermediate crops, palm fatty acid distillate, palm and soy-derived materials, soap stock and its derivatives (Article 4 Paragraph 5).

REFUELEU AVIATION

Overview of the main provisions



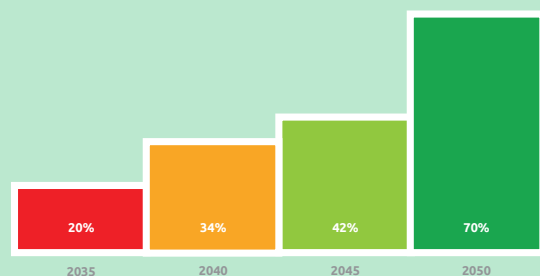
Flexibility mechanism

(Article 15)

From 1 January 2025 until 31 December 2034, for each reporting period, an aviation supplier may supply the minimum share of SAF as a weighted average over all the aviation fuel it supplied across Union airports.

Targets – Volume shares

(Annex I)



From 1 January **2025**, each year a minimum share of **2% of SAF**,

From 1 January **2030**, each year a minimum share of **6% of SAF, of which**

- until 31 December **2031** an average share over the period of **1,2% of synthetic aviation fuels**, but minimum 0,7% each year,
- until 31 December **2034** an average share over the period of **2,0% of synthetic aviation fuels**, but minimum 1,2% each year until 31 December 2033 and minimum 2,0% until 31 December 2034,

From 1 January **2035**, each year a minimum share of **20% of SAF**, of which a minimum share of **5% of synthetic aviation fuels**.

From 1 January **2040**, each year a minimum share of **34% of SAF**, of which a minimum share of **10% of synthetic aviation fuels**.

From 1 January **2045**, each year a minimum share of **42% of SAF**, of which a minimum share of **15% of synthetic aviation fuels**.

From 1 January **2050**, each year a minimum share of **70% of SAF**, of which a minimum share of **35% of synthetic aviation fuels**.

Reports and Review

(Article 17)

By **1 January 2027** and every four years thereafter the Commission shall present a report to the European Parliament and Council on the application of the Regulation. As part of this report the Commission shall assess possible measures to optimise the fuel content in aviation fuels.



FUELEU MARITIME

Overview of the main provisions



Scope of the Regulation

(Article 2)

Scope: Ships above 5000 GT, 100% intra-EU traffic + 50% extra-EU, EU ports.

Exemptions: Small islands less than 200.000 residents, PSO connections between island MS and other MS and between island and mainland of the same MS, outmost regions, transshipment ports, ice class ships and ships navigating in ice.

Methodology for target calculation

(Article 4)

GHG reduction basis: annual average GHG intensity of the energy used on-board.

GHGs: CO₂, CH₄ and N₂O (Article 3 Point 34).

Methodology for calculation: Life cycle (Well-to-Wake) evaluation of marine fuels (Annex I).

Reference value: 91.16 grams of CO₂ equivalent per MJ (Article 4 Paragraph 2).

Targets

(Article 4 Paragraph 2)

2% in 2025

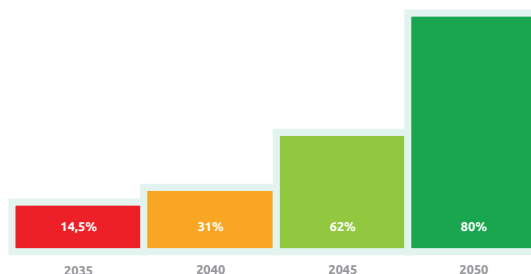
6% in 2030

14,5% in 2035

31% in 2040

62% in 2045

80% in 2050



Zero emissions at berth

(Article 6)

From 2030, all container or passenger ships are required to connect to onshore power supply in all AFIR ports, from 2035 also in all non-AFIR ports.

Ships at anchorage not covered, but voluntary opt-in provision for Member States.

Exemptions – short stays less than 2 hours, unscheduled port call due to safety, use of zero-emission technologies (for now fuel cells, on-board electricity storage, on-board electricity production from wind and solar energy), unavailable OPS connection in port or incompatible equipment, emergency wind and solar energy), unavailable OPS connection in port or incompatible equipment, emergency.

RFNBOs

(Article 5)

Multiplier 2 – Energy from RFNBOs counts twice.

If RFNBO share in maritime fuel mix is less than 1% in 2023, then **RFNBO subtarget of 2% will be applicable as from 2034.**

FUELEU MARITIME

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Eligibility of fuels

(Article 10)

RFNBOs, recycled carbon fuels, biofuels according to RED directive, low-carbon gases, other hydrogen-derived fuels through upcoming recast of the Gas directive.

Food and feed crops biofuels have the same emission factor as the least favourable fossil fuels = **no motivation for blending**.

All other biofuels including UCOME are calculated with emission savings according to RED.

In case substitute sources of energy are installed on board, a **reward factor for substitute sources of energy can be applied**.

In case of **wind power such reward factor is (Annex I):**

- 0,99 if the share of wind energy is 0,05
- 0,97 if the share of wind energy is 0,1
- 0,95 if the share of wind energy is equal or more then 0,15

Flexibility mechanism

(Article 20, 21)

Banking and borrowing – surpluses and small deficits can be carried over to the next year (Article 20).

Voluntary and open pooling mechanism to incentivise overachievers and encourage the rapid deployment of the most advanced options (Article 21).

Monitoring and reporting

(Article 7, Article 15)

Based on MRV approach (Measurement, Reporting and Verification) with some additional data like calculation of compliance balance, recording of penalties, exchange and notifications between user groups).

FuelEU Database (Article 19).

FuelEU Penalties (Article 23).

Review clause

(Article 30 Paragraph 1)

Extensive report and review clause with the first deadline **31 December 2027** and every 5 years thereafter, **including assessment and possibility to include new GHG abatement technologies** such as energy provided by wind, on-board carbon capture etc...

Implementation

(Article 32)

18-months implementation period to prepare implementing and delegated acts + develop the FuelEU Database in cooperation with the European Sustainable Shipping Forum and European Maritime Safety Agency.

Applicability as from 1 January 2025 (monitoring plan from August 2024).





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