## Basic information

**COD** - Ordinary legislative procedure (ex-codecision procedure)  
Regulation

Sustainable aviation fuels (ReFuelEU Aviation Initiative)

### Subject
- 3.20.01 Air transport and air freight
- 3.60.02 Oil industry, motor fuels
- 3.60.05 Alternative and renewable energies
- 3.70.02 Atmospheric pollution, motor vehicle pollution
- 3.70.03 Climate policy, climate change, ozone layer

**Legislative priorities**  
Joint Declaration 2023-24  
Joint Declaration 2021  
Joint Declaration 2022

## Procedure completed

### Key players

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<th>European Parliament</th>
<th>Committee responsible</th>
<th>Rapporteur</th>
<th>Appointed</th>
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<td></td>
<td>TRAN Transport and Tourism</td>
<td>BAUZÁ DÍAZ José Ramón</td>
<td>29/10/2021</td>
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<td></td>
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<td>MONTEIRO DE AGUIAR Cláudia</td>
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<td>DALY Clare</td>
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<td>ENVI Environment, Public Health and Food Safety</td>
<td>GONZÁLEZ CASARES Nicolás</td>
<td>16/09/2021</td>
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<tr>
<td></td>
<td>(Associated committee)</td>
<td>PAULUS Jutta</td>
<td>30/09/2021</td>
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## Key events

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## Technical information

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<td>Legal basis</td>
<td>Rules of Procedure EP 57; Treaty on the Functioning of the EU TFEU 100-p2</td>
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Sustainable aviation fuels (ReFuelEU Aviation Initiative)

PURPOSE: to ensure a level playing field for sustainable air transport, when it comes to the use of aviation fuel (Refuel EU).


ROLE OF THE EUROPEAN PARLIAMENT: the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: sustainable development of air transport requires the introduction of measures aimed at reducing the carbon emissions from
aircraft flying from Union airports. Such measures should contribute to meeting the Union's climate objectives by 2030 and 2050. Variations in fuel prices can significantly affect aircraft operators' economic performance and negatively impact competition on the market. Practices such as fuel tankering occur when aircraft operators uplift more aviation fuel than necessary at a given airport, with the aim to avoid refuelling partially or fully at a destination airport where aviation fuel is more expensive. This practice leads to higher fuel burn than necessary, hence higher emissions, and undermines fair competition in the Union air transport market.

It is essential to set harmonised rules across the EU internal market, applying directly and in a uniform way to aviation market actors on the one hand, and aviation fuels market actors on the other hand.

The European Green Deal launched a new growth strategy for the EU that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy. The European Climate Law has made the EU’s climate neutrality target by 2050 legally binding.

The Commission has presented a complementary and interconnected set of proposals as part of the 2030 Climate and Energy Fit for 55 package to achieve the greenhouse gas emission reduction target of at least 55% compared to 1990. This Fit for 55 legislative package is the most comprehensive building block in the efforts to implement the ambitious new 2030 climate target, and all economic sectors and policies will need to make their contribution.

The Fit for 55 package, the Next Generation EU and the Multiannual Financial Framework for 2021-2027 will help to achieve the twin green and digital transitions that Europe is aiming for.

CONTENT: with this proposal, the Commission sets out a framework restoring and preserving a level playing field on the air transport market as regards the use of aviation fuels. Such a framework should prevent divergent requirements across the EU that would exacerbate refuelling practices distorting competition between aircraft operators or putting some airports at competitive disadvantage with others.

The proposal aims to support a swift transition from fossil fuels towards sustainable fuels in air transport making air travel greener. More specifically, it:

- lays down harmonised rules aiming to maintain a competitive level playing field on the Union aviation internal market while increasing the uptake of sustainable aviation fuels by aircraft operators and the distribution of sustainable aviation fuels at EU airports;

- establishes the obligation for aviation fuel suppliers to ensure that all aviation fuel made available to aircraft operators at Union airports contains a minimum share of sustainable aviation fuel, including a minimum share of synthetic fuel. Synthetic aviation fuels have the potential to achieve emission savings as high as 85% or more compared to fossil aviation fuel. When produced from renewable electricity and carbon captured directly from the air, the potential emission savings compared to fossil aviation fuel can reach 100%;

- establishes the obligation for aircraft operators to ensure that the yearly quantity of aviation fuel uplifted at a given Union airport is of at least 90% of the yearly aviation fuel required;

- defines the obligations for EU airports to provide the infrastructure necessary to facilitate the access of aircraft operators to aviation fuels containing shares of sustainable aviation fuels;

- creates a transition period of 5 years in which aviation fuel suppliers may supply the minimum share of sustainable aviation fuel as an average over all the aviation fuel they supplied across Union airports for that reporting period;

- defines, in an Annex, the minimum shares of sustainable aviation fuel, including the minimum shares of synthetic fuel, of the aviation fuel to be supplied.

Monitoring and reporting

The proposed Regulation includes monitoring, reporting and verification systems that allow to ensure that it is implemented correctly. In particular, aircraft operators and fuel suppliers will be required to report on a yearly basis. Further, on a yearly basis, EASA will report to the Commission notably on the compliance of economic operators and on the status of the aviation and sustainable aviation fuels markets.

Lastly, the Commission will report to the European Parliament and the Council, at least every five years after the date of application of this Regulation, the evolution of the aviation fuels market and its impact on the aviation internal market of the Union.

Sustainable aviation fuels (ReFuelEU Aviation Initiative)

The European Parliament adopted by 334 votes to 95, with 153 abstentions, amendments to the proposal for a regulation of the European Parliament and of the Council on ensuring a level playing field for sustainable air transport.

The matter was referred back to the committee responsible for inter-institutional negotiations.

The main amendments adopted in plenary concern the following points:

Subject matter

The proposal is part of the Fit for 55 in 2030 package and aims to increase the share of sustainable fuels used by EU airlines and airports in order to reduce aviation emissions and ensure Europe's carbon neutrality by 2050.

This Regulation should apply to aircraft operators, Union airports, or where applicable, the managing body of an airport, and to aviation fuel suppliers. Aircraft operator should mean a person that operated at least 52 commercial air transport flights departing from Union airports in the reporting period.

Accelerated integration of sustainable fuels

Members revised upwards the Commission's original proposal for the minimum share of renewable fuels to be made available at EU airports. From 2025 onwards, this minimum share by volume should be 2% (including a minimum share of 0.04% of synthetic fuels), rising to 6% in 2030, 20% in 2035, 37% in 2040, 54% in 2040 and 85% in 2050 (including a minimum share of 50% of synthetic fuels). The Commission had proposed 32% by 2040, 38% by 2045 and 63% by 2050.
Where an aviation fuel supplier fails to supply the minimum shares for a given reporting period, it should report the shortfall, and the reasons for it, to the European Union Aviation Safety Agency. Where the Commission assesses that this shortfall is not caused by lack of resource availability, the fuel supplier should make every possible effort to at least complement that shortfall in the subsequent reporting period.

Broader definition of sustainable fuels

Parliament amended the proposed definition of sustainable fuels for aviation, a term that covers synthetic fuels or certain biofuels derived from agricultural and forestry residues, algae, bio-waste or used cooking oil.

Members added to this definition liquid and gaseous fuels produced from waste treatment gases and exhaust gases of non-renewable origin that unavoidably and unintentionally arise from production processes in industrial installations. Until 31 December 2034, sustainable aviation fuels could also include biofuels that meet the sustainability and greenhouse gas emission reduction criteria set out in Article 29 of Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources and that are certified in accordance with that directive.

However, Members excluded fuels made from food or feed crops, intermediate crops, palm fatty acid distillate and all palm and soy-derived materials, as well as soap stocks and their derivatives.

Inclusion of renewable electricity and hydrogen in the sustainable fuel mix

Members stressed that other sustainable aviation fuels, such as electricity or hydrogen, are very promising technologies and are expected to progressively contribute to the decarbonisation of air transport, beginning with short-haul flights.

When electric or hydrogen-powered aircrafts become mature and commercially available, it will be necessary for airports covered by this Regulation to take all necessary measures to facilitate an appropriate infrastructure for hydrogen and electric recharging for aircrafts, in accordance with the respective deployment plan of the national policy framework, as set out in the proposed Regulation on the deployment of alternative fuels infrastructure.

Sustainable Aviation Fund

Parliament proposed the creation of a Sustainable Aviation Fund from 2023 to 2050 to accelerate decarbonisation in the sector and support investment in sustainable fuels, innovative aircraft propulsion technologies, research into new engines and direct air capture technology. The Fund should constitute an integral part of the EU budget and its budget should be established within the limits of the multi-annual financial framework. The revenue generated by the penalties provided for in the Regulation should be allocated to the Fund.

EU labelling scheme for the environmental performance of aviation

In order to further promote the decarbonisation of the aviation sector and to increase the transparency of information to consumers on the environmental performance of aircraft operators, Parliament proposed that the Commission create a comprehensive labelling scheme by 2024 for the environmental performance of aircraft, airlines and commercial flights, to be developed and implemented by the European Union Aviation Safety Agency (EASA).

Sustainable aviation fuels flexibility mechanism

Parliament proposed to establish a flexibility mechanism, with a transitional period of ten years from the date of application of the regulation, to allow fuel suppliers and aircraft operators a reasonable period of time to organise the distribution and use of sustainable aviation fuels in a cost-effective manner at the EU airports of their choice and in proportion to their needs. This flexibility mechanism would also contribute to preserving air connectivity, avoiding that less connected European regions with fewer alternative transport modes are disproportionately affected.

During the transitional period, the Commission should regularly review the integrity and transparency of the market for sustainable aviation fuels. In particular, it should analyse the functioning of the market, including its volatility, unusual price evolution or trading behaviour of market participants that could indicate possible monopolistic behaviour.

Sustainable aviation fuels (ReFuelEU Aviation Initiative)

The European Parliament adopted by 518 votes to 97, with 8 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council on ensuring a level playing field for sustainable air transport.

Parliaments position adopted at first reading following the ordinary legislative procedure amended the Commission proposal as follows:

Subject matter and scope

The ReFuelEU aviation rules are part of the Fit for 55 package, the EUs plan to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels and to ensure the EU becomes climate neutral by 2050.

This Regulation lays down harmonised rules on the uptake and supply of sustainable aviation fuels (SAF) in order to reduce emissions from the sector. It should apply to aircraft operators, EU airports and their respective EU airport managing bodies, and aviation fuel suppliers. It should only apply to commercial air transport operations.

Accelerated integration of sustainable aviation fuels

Members secured an ambitious timeline on the provision of the jet fuel mix, obliging EU airports and fuel suppliers to ensure that, starting from 2025, at least 2% of aviation fuels should be green, with this share increasing every five years: 6% in 2030, 20% in 2035, 34% in 2040, 42% in 2045 and 70% in 2050. In addition, a specific proportion of the fuel mix (1.2% in 2030, 2% in 2032, 5% in 2035 and progressively reaching 35% in 2050) must comprise synthetic fuels like e-kerosene.

Broader definition of sustainable aviation fuels

Parliament amended the proposed definition of sustainable aviation fuels, a term which covers synthetic aviation fuels, aviation biofuels, or recycled carbon-based aviation fuels.
However, Members excluded fuels made from food or feed crops, intermediate crops, palm fatty acid distillate and all materials derived from palm and soya, as well as soap stock and its derivatives.

The amended text also stated that other aviation fuels such as electricity or hydrogen are promising technologies and are expected to progressively contribute to the decarbonisation of air transport, beginning with short-haul flights.

Promoting hydrogen and electricity supply at the Union airports

Union airport managing bodies, aviation fuel suppliers and fuel handlers should cooperate and undertake efforts to facilitate the access of aircraft operators to hydrogen or electricity used primarily for the propulsion of an aircraft and to provide the infrastructure and services necessary for the delivery, storage and uplifting of such hydrogen or electricity to refuel or recharge aircraft in line with national policy frameworks for deployment of alternative fuel infrastructure where relevant.

Environmental Labelling Scheme

A voluntary environmental labelling scheme enabling the environmental performance of flights to be measured is hereby established. This eco-label should indicate the carbon footprint of a flight per passenger and the expected carbon saving per kilometre. It should enable passengers to compare the environmental performance of flights operated by different airlines on the same route. The labels should be valid for a limited period not exceeding one year.

Where the aircraft operator does not submit all the information necessary for the Agency to issue the requested label, the Agency shall reject the request. The Agency should review periodically whether the factors on the basis of which a label was issued for each flight or set of flights operated under the same conditions have changed. If the Agency concludes that a label is no longer appropriate, it should, after giving the operator the opportunity to be heard, revoke the existing label or issue a new label.

By 1 July 2027, the Commission should identify and assess the developments on the functioning of the labelling scheme.

Flexibility mechanisms

The Regulation provides for a flexibility mechanism to be designed and applied to allow a lead-time of 10 years for the SAF industry (from 1 January 2025 to 31 December 2034), to develop production and supply capacity accordingly and to allow aviation fuel suppliers to meet their obligations in the most cost-effective way, without reducing the overall environmental ambitions of this Regulation, as well as to allow Union airports managing bodies, aviation fuel suppliers and aircraft operators to make the necessary technological and logistical investments.

Reports and review

By 1 January 2027, and every four years thereafter, the Commission should present a report to the European Parliament and to the Council, on the application of this Regulation.

The resolution should:
- contain a detailed assessment of the evolution of the aviation fuels market, and the impact of that evolution on the functioning of the aviation internal market of the Union including on the competitiveness and connectivity, in particular for islands and remote territories, and on the cost-effectiveness of lifecycle emissions reductions;
- assess the need for investments, employment and training, and research and innovation in SAF;
- inform on technological advancements in the area of research and innovation in the aviation industry which are relevant to SAF, including with regards to the reduction of non-CO2 emissions or direct air capture technologies;
- evaluate the possible widening of the scope of this Regulation to include other energy sources and other types of synthetic fuels.

Sustainable aviation fuels (ReFuelEU Aviation Initiative)

PURPOSE: to ensure a level playing field in the EU air transport market while increasing the use of sustainable aviation fuels (SAF).


CONTENT: the Regulation establishes harmonised rules for the uptake and supply of sustainable aviation fuels (SAF). The main aim of the ReFuelEU Aviation initiative, which is a key part of EU's Fir for 55 Package is to increase both the demand for and supply of SAF, which has lower CO2 emissions than fossil kerosene, while ensuring a level playing field across the EU air transport market.

The Regulation will apply to aircraft operators, Union airports and their respective Union airport managing bodies, and aviation fuel suppliers.

The new Regulation includes the following main provisions.

Accelerated integration of sustainable aviation fuels

Starting from 2025, at least 2% of aviation fuels should be green, with this share increasing every five years: 6% in 2030, 20% in 2035, 34% in 2040, 42% in 2045 and 70% in 2050. In addition, a specific proportion of the fuel mix (1.2% in 2030, 2% in 2032, 5% in 2035 and progressively reaching 35% in 2050) must comprise synthetic fuels like e-kerosene.

Refuelling obligation for aircraft operators

The yearly quantity of aviation fuel uplifted by a given aircraft operator at a given Union airport shall be at least 90% of the yearly aviation fuel required. The obligation for aircraft operators to ensure that the yearly quantity of aviation fuel uplifted at a given EU airport is at least 90% of the yearly aviation fuel required, to avoid tankering practices which would bring additional emissions from extra weight.

An aircraft operator may fall below the threshold where necessary for reasons of compliance with applicable fuel safety rules. In this case, it will have to justify the reasons for going below this threshold.

EU airport managing bodies will take all necessary measures to facilitate aircraft operators’ access to aviation fuels containing minimum
shares of SAF in accordance with the Regulation.

Eligible sustainable aviation fuels

The Regulation includes the following as eligible sustainable aviation fuels and synthetic aviation fuels: certified biofuels, renewable fuels of non-biological origin (including renewable hydrogen) and recycled carbon aviation fuels complying with the Renewable Energy Directive (RED) sustainability and emissions saving criteria, up to a maximum of 70% with the exception of biofuels from food and feed crops, as well as low-carbon aviation fuels (including low-carbon hydrogen), which can be used to reach the minimum shares in the respective part of the Regulation.

Competent authority

Member States will designate the competent authority or authorities responsible for enforcing the application of this Regulation and for imposing the fines for aircraft operators, on the Union airport managing bodies, and on aviation fuel suppliers.

Competent authorities will carry out their supervisory and enforcement tasks impartially and transparently, and independently of aircraft operators, aviation fuel suppliers and EU airport managing bodies.

The Regulation contains provisions on data collection and reporting obligations for aviation fuel suppliers and aircraft operators, enabling the effects of the regulation on the competitiveness of EU operators and hubs to be monitored.

Labelling scheme

A voluntary environmental labelling scheme enabling the environmental performance of flights to be measured is hereby established. This eco-label should indicate the carbon footprint of a flight per passenger and the expected carbon saving per kilometre. It should enable passengers to compare the environmental performance of flights operated by different airlines on the same route. The labels should be valid for a limited period not exceeding one year.

Flexibility mechanisms

The Regulation provides for a flexibility mechanism to be designed and applied to allow a lead-time of 10 years (from 1 January 2025 to 31 December 2034) for the SAF industry to develop production and supply capacity accordingly and to allow aviation fuel suppliers to meet their obligations in the most cost-effective way, without reducing the overall environmental ambitions of this Regulation, as well as to allow Union airports managing bodies, aviation fuel suppliers and aircraft operators to make the necessary technological and logistical investments.

Reports and reviews

No later than 1 January 2027 and every four years thereafter, the Commission will present to the European Parliament and the Council a report on the application of the Regulation.

The report will contain a detailed assessment of the development of the aviation fuel market and its impact on the functioning of the EU internal aviation market, including competitiveness and connectivity, in particular for islands and remote territories, and on the cost-effectiveness of life-cycle emission reductions.

The report will also assess: (i) the needs in terms of investment, employment and training, as well as research and innovation in the field of SAFs; (ii) the possible need to review the scope of the Regulation, the definition of SAFs, the eligible fuels and minimum shares set out in Annex I, as well as the level of fines.


APPLICATION: from 1.1.2024 (with the exception of certain provisions which apply from 1.1.2025).

<p>| Transparency |
|--------------|-----------------|-----------------|-----------------|
| CUFFE Ciarán | Shadow rapporteur | TRAN | 27/04/2023 | Transport and Environment (European Federation for Transport and Environment) |
| BAUZÁ DÍAZ José Ramón | Rapporteur | TRAN | 22/03/2023 | CEPSA |
| PAULUS Jutta | Rapporteur | TRAN | 30/01/2023 | T&amp;E |
| PAULUS Jutta | Rapporteur | TRAN | 30/01/2023 | T&amp;E |
| PAULUS Jutta | Rapporteur for opinion | TRAN | 07/12/2022 | Sustainable Aviation Fuels Forum / Inventu |
| CUFFE Ciarán | Shadow rapporteur | TRAN | 29/11/2022 | Airlines for Europe |
| BAUZÁ DÍAZ José | Rapporteur | TRAN | 24/11/2022 | ADS |</p>
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<td>CUFFE Ciarán</td>
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<td>17/11/2022</td>
<td>Bureau Européen des Unions de Consommateurs</td>
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<td>ERTUG Ismail</td>
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