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UK Emissions Trading Scheme (ETS): Treatment of Sustainable Aviation Fuel (SAF) Consultation

A joint consultation of the UK Government, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland

Closing date: 15 June 2026



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Executive summary

The UK Emissions Trading Scheme (ETS) came into operation on 1 January 2021 following the UK's departure from the European Union (EU) and the end of the UK's participation in the EU Emissions Trading System (EU ETS). The scheme is a key part of our approach to addressing climate change, setting a limit on emissions from the sectors covered and ensuring an appropriate price is applied to them. The scheme is jointly run by the UK ETS Authority (hereafter 'the Authority') which is comprised of the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland.

Sustainable aviation fuel (SAF) is one of the key technologies that will help the aviation sector play its part in delivering net zero. SAF is a sustainable alternative to traditional aviation fuel, fossil kerosene. Although SAF produces comparable volumes of carbon dioxide (CO₂) as fossil kerosene when burned, it makes significant greenhouse gas (GHG) emissions savings across its lifecycle (it has the potential to achieve over 70% emissions reductions when compared to fossil kerosene). Aircraft operators can currently claim emissions reductions from eligible SAF and therefore reduce their UK ETS surrender obligations.

In March 2022, the Authority consulted on the development of the UK ETS, including a Call for Evidence seeking views on how the then forthcoming SAF Mandate¹ and UK ETS could interact.² The Authority committed in the subsequent response, published in July 2023, to continue to develop proposals on how the UK ETS should treat the claiming of emissions reductions from SAF by aircraft operators.³ This further consultation outlines these proposals and seeks views on these in the context of the introduction of the SAF Mandate.

It was announced at the United Kingdom – European Union Summit on 19 May 2025 that the UK and EU have agreed to work towards linking the UK ETS and EU ETS as set out in a Common Understanding.⁴ There are many benefits to a linked scheme, including the creation of and access to a larger, deeper and more liquid carbon market which would provide businesses with more certainty and support investment. It is also expected that ETS linking would make UK and EU energy markets more efficient and effective, reducing costs in the longer term. Overall, linking the UK and EU ETS would mean a more cost-effective path to net zero.

The proposals in this document set out potential future changes to SAF policy for the UK ETS. The Authority will need to consider any implications of ETS linking once negotiations have concluded.

Respondents need only reply to the questions that interest them or that they have views on. There is no requirement nor expectation to respond to every question in this consultation.

¹ [Sustainable Aviation Fuel \(SAF\) Mandate - GOV.UK](https://www.gov.uk/government/consultations/sustainable-aviation-fuel-saf-mandate).

² <https://assets.publishing.service.gov.uk/media/624ec31de90e072a04c06520/developing-the-uk-ets-english.pdf>.

³ <https://assets.publishing.service.gov.uk/media/649eb7aa06179b000c3f7608/uk-emissions-trading-scheme-consultation-government-response.pdf>.

⁴ https://assets.publishing.service.gov.uk/media/682afb7002662c6f8ec243ef/UK_EU_Summit_-_Common_Understanding.pdf.

General information

Why we are consulting

In June 2023, the UK ETS Authority made a commitment to develop, then consult on, proposals regarding the claiming of emissions reductions from SAF by aircraft operators under the UK ETS.

The Authority is therefore seeking views on options for the future treatment of SAF in the UK ETS. We wish to ensure that SAF is accounted for appropriately in the UK ETS, taking into account interaction with the UK Government's SAF Mandate which came into effect on 1 January 2025. This consultation also considers potential operational changes to how SAF use under the UK ETS is regulated.

Consultation details

Issued: 23 March 2026

Respond by: 15 June 2026

Enquiries to:

Emissions Trading Team
Department for Energy Security and Net Zero
Third Floor
3 Whitehall Place
London
SW1A 2EG

Email: ukets.consultationresponses@energysecurity.gov.uk

Consultation reference: UK Emissions Trading Scheme (ETS): Treatment of Sustainable Aviation Fuel (SAF).

Audiences: This consultation will be of particular interest to individual companies and representatives of aircraft operators, fuel and energy suppliers, environmental groups and industries engaged in waste to fuel activity. The consultation is not limited to these stakeholders; any organisation or individual is welcome to respond.

Territorial extent:

This consultation relates to proposals to develop the UK ETS, which operates across England, Scotland, Wales and Northern Ireland. This is a joint consultation, published by the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland.

How to respond

Respond online at: energygovuk.citizenspace.com/energy-markets/uk-ets-treatment-of-sustainable-aviation-fuel/

or

Email to: ukets.consultationresponses@energysecurity.gov.uk

Write to:

Emissions Trading
Department for Energy Security and Net Zero
3rd Floor
3 Whitehall Place
London
SW1A 2EG

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: bru@energysecurity.gov.uk.

Introduction

Aviation decarbonisation, sustainable aviation fuel and the UK ETS

Aviation provides essential domestic and international connectivity and plays a key role in supporting trade and investment. Aviation is a particularly hard to decarbonise sector, due in part to the challenges of technology, lengthy innovation and product cycles and its inherently global nature.

As other sectors decarbonise, GHG emissions from aviation will come to represent an increasing share of total UK emissions. As such, there is an urgent need to promote the available means to decarbonise the sector.

Carbon pricing incentivises decarbonisation by placing a cost on emissions. Alongside its important role in helping to achieve the four UK nations' ambitious climate targets, the UK ETS will continue to be a vital lever for decarbonising the UK aviation sector. In 2024, the UK ETS covered aviation emissions amounted to approximately 9.0 million tonnes of CO₂ equivalent (MtCO₂e).

SAF is one of the key technologies that will help the aviation sector to decarbonise. SAF is a sustainable alternative to traditional aviation fuel, fossil kerosene. Although producing comparable volumes of CO₂ as fossil kerosene when burned, it makes significant GHG emissions savings across its lifecycle. It has the potential to achieve over 70% emissions reductions when compared to fossil kerosene. Unlike conventional jet fuels which take fossil resources out of the ground and release previously stored carbon into the atmosphere, SAF uses CO₂ which is part of the carbon cycle and would otherwise have been emitted into the atmosphere or is taken directly from the atmosphere. Factors such as the type of feedstock the SAF is made from, the production process and how the fuel is transported will all affect the lifecycle emissions savings of SAF.

At present, the majority of available SAF are biofuels known as hydroprocessed esters and fatty acids (HEFA) and can be made by refining vegetable oils, waste oils (such as used cooking oil), or fats, through a process of deoxygenation and hydroprocessing. Novel SAF is in development and includes other types of biofuels, recycled carbon fuel (RCF) and power-to-liquid (PtL) fuels.

RCFs provide carbon savings where it is more efficient to process feedstocks, such as municipal solid waste and industrial waste gases, into fuels, instead of disposing or treating them via conventional means such as energy from waste. PtL is developed via a process where renewable or nuclear energy is used to create hydrogen, which is then combined with captured carbon dioxide to synthesise a liquid fuel.

In addition to the lifecycle emissions savings, there are other benefits to SAF. It is a drop-in fuel which means that it can be safely blended with fossil kerosene. It can also be used in existing infrastructure without the need to retrofit or purchase new aircraft. The development of technology for zero emission flight, through use of hydrogen propulsion and battery-electric aircraft, is essential to the sector's full decarbonisation. However, it is at an earlier stage of development and deployment than SAF production.

SAF could also potentially reduce aviation's non-CO2 climate impacts. In November 2023, Virgin Atlantic flew a transatlantic flight from London to New York using 100% SAF, in partnership with the UK Department for Transport (DfT) and others. This resulted in a 40% reduction in particulate matter emissions compared to a fully kerosene-fuelled flight, which are thought to play an important role in the formation of condensation trails (contrails).⁵

However, significant scientific uncertainties remain about aviation's non-CO2 impacts and therefore, in 2023, the UK Government in partnership with the Natural Environment Research Council and the Aerospace Technology Institute launched a multi-year Non-CO2 Research and Development (R&D) programme to better understand aviation's non-CO2 impacts and to identify and develop potential mitigation options. The R&D programme supports both industry and academic-led projects, and 13 projects have now been received funding worth nearly £20 million, some of which are exploring the non-CO2 impacts of SAF. There will be further calls for projects over the programme lifetime and the Authority will consider any relevant findings to inform future policy development.

The need to decarbonise aviation has been acknowledged globally, and the UK recognises the importance of international action to tackle emissions from aviation. In 2016, at the 39th International Civil Aviation Organization (ICAO) Assembly, member states agreed to implement the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – the first worldwide scheme of its kind to address CO2 emissions in any single sector. Under CORSIA, aeroplane operators can claim emissions reductions from CORSIA Eligible Fuels (CEF), including SAF, and therefore reduce their offsetting requirements, reflecting the importance of SAF in global aviation decarbonisation. At the 41st ICAO Assembly in 2022, a global aspirational goal for international aviation of net zero CO2 emissions by 2050 was agreed. At the 42nd ICAO Assembly in 2025, the Assembly confirmed a collective Vision to reduce CO2 emissions in international aviation by 5% by 2030, as part of a comprehensive framework to scale up production and deployment of cleaner aviation fuels. The adoption of ambitious new standards on the CO2 efficiency of aircraft was also welcomed.

Domestically, the UK Government is taking several steps to support SAF uptake in the UK, including the introduction of the UK SAF Mandate. The Mandate came into effect on 1 January 2025 and is the UK's key policy mechanism to secure demand for SAF. It places an obligation on aviation fuel suppliers in the UK to provide an annually increasing amount of SAF within the overall UK aviation fuel mix. Details of the SAF Mandate are expanded on later in this document.

The UK Government will also be laying legislation to introduce a revenue certainty mechanism (RCM). The Sustainable Aviation Bill will support SAF production in the UK by providing revenue certainty to encourage investment in the construction of SAF plants across the UK. Following consultation, the UK Government has decided to proceed with the guaranteed strike price mechanism. This mechanism works in a similar way to the contracts for difference schemes in other low carbon and renewable energy sectors. This will help drive our mission to kickstart economic growth and make Britain a clean energy superpower.

Aircraft operators can already claim emissions reductions from eligible SAF and therefore reduce their UK ETS surrender obligations per article 4(2A) of the Greenhouse Gas Emissions

⁵ [The future of flight takes off as Virgin airliner crosses Atlantic solely powered by sustainable aviation fuel - GOV.UK](https://www.gov.uk/government/news/the-future-of-flight-takes-off-as-virgin-airliner-crosses-atlantic-solely-powered-by-sustainable-aviation-fuel).

Trading Scheme Order 2020 (UK ETS Order).⁶ Eligible SAF must currently be biogenic SAF that meets or exceeds the sustainability criteria set out in the Schedule to the Renewable Transport Fuel Obligations (RTFO) Order 2007⁷ and is deemed to have an emissions factor of zero (is zero rated, meaning the fuel is treated as though it emits zero GHG emissions) if all of the requirements for making a claim are met.

This consultation

The purpose of this consultation is to invite views on how the treatment of SAF under the UK ETS can be improved in the context of the introduction of the SAF Mandate.

The consultation will examine and pose questions concerning:

- Whether the Authority should expand the types of SAF eligible for an emissions reduction claim under the UK ETS beyond biofuels.
- Whether the Authority should align SAF eligibility under the UK ETS with the SAF Mandate sustainability criteria.
- Whether the Authority should maintain the current emissions saving threshold for eligible SAF under the UK ETS or align with the SAF Mandate threshold.
- How the UK ETS should recognise and account for SAF: continue zero rating; recognise SAF in proportion to its emissions savings; or treat it in the same way as fossil kerosene and not recognise its use.
- Other related potential operational and legal changes to existing UK ETS policy and legislation.

⁶ The detailed legal provisions for claiming emissions reductions from SAF are set out in Article 54 of the Monitoring and Reporting Regulation 2018, as modified by the Greenhouse Gas Emissions Trading Scheme Order 2020, and can be found here: <https://www.legislation.gov.uk/ukxi/2020/1265/schedule/4/paragraph/27>.

⁷ [The Renewable Transport Fuel Obligations Order 2007](#).

Consultation

Background: UK SAF policy

The Renewable Transport Fuel Obligation (RTFO)

The RTFO commenced on 15 April 2008 and is one of the UK's main policies for reducing GHG emissions from transport. The RTFO delivers GHG emissions savings by encouraging the supply of renewable fuels for use in UK transport. It is administered by the Low Carbon Fuels (LCF) Delivery Unit within the UK Department for Transport (DfT).

Under the RTFO, suppliers of relevant transport fuel in the UK must meet an annual obligation to supply a certain amount of sustainable renewable fuel. Tradeable certificates are awarded for the supply of eligible fuels which can be redeemed to meet the supplier's obligation or sold to other suppliers who have not met their obligation.

Eligible fuels must meet or exceed a lifecycle GHG emissions savings threshold of 65% against a comparator of 94gCO₂/MJ. This is reduced to 55% for older production plants,⁸ and eligible fuels can be biofuels, renewable fuels of non-biological origin (RFNBOs) and recycled carbon fuels (RCFs).

The scheme supported the supply of SAF until January 2025 when the SAF Mandate began. Since then, fuel suppliers cannot claim for support for SAF in the form of certificates from the RTFO, given that SAF is now supported by the SAF Mandate scheme. The RTFO continues to apply to other types of transport fuel.

SAF eligible for claims for emissions reductions under the UK ETS must currently be biogenic SAF that meets or exceeds the sustainability criteria set out in the Schedule to the RTFO Order 2007 and is zero rated if all of the requirements for making a claim are met.

The UK SAF Mandate

The UK SAF Mandate is the UK's key policy mechanism to secure demand for SAF. It delivers GHG emissions savings by requiring an increase in SAF supply within the aviation industry. The Mandate sets a legal obligation on fuel suppliers in the UK to supply an increasing proportion of SAF over time, with suppliers receiving certificates for the SAF they supply. The number of certificates they receive is calculated in proportion to the GHG emissions reductions that the fuel delivers compared to fossil kerosene i.e., the greater the lifecycle emissions savings, the greater the number of certificates suppliers receive. Certificates are used by fuel suppliers to demonstrate compliance to the SAF Mandate Administrator (the LCF Delivery Unit) in DfT.

The SAF Mandate has two obligations – the 'main obligation' and a 'power-to-liquid (PtL) obligation'. The main obligation for 2026 is set at 3.6% of the total jet fuel supplied. The total obligation will increase annually to reach 10% in 2030 and 22% in 2040. The PtL obligation is designed to accelerate the development of PtL fuels, which are not subject to the same feedstock constraints as other types of SAF, and have lower risks of negative environmental

⁸ <https://www.legislation.gov.uk/ukxi/2007/3072/schedule/paragraph/4>.

impacts than other SAF pathways. The PtL obligation will be introduced from 2028 at 0.2% of total jet fuel demand and will reach 3.5% of total jet fuel demand in 2040. Fuel suppliers need to comply with both obligations.

To ensure that space is left for the more advanced fuels to develop, the SAF Mandate limits the amount of HEFA that can be used to meet the main obligation. HEFA can contribute a maximum amount (100%) of the UK SAF Mandate target in 2026, decreasing to 71% in 2030 and 35% in 2040.

In order to receive certificates for SAF they have supplied, fuel suppliers must apply to the LCF Delivery Unit, providing evidence that the fuel is eligible and meets the sustainability criteria provided for in the Schedule to the Renewable Transport Fuel Obligations (Sustainable Aviation Fuel) Order 2024 (SAF Mandate Order). These criteria apply to all SAF, whether produced in the UK or imported. SAF must be made from sustainable, non-recyclable wastes or residues (i.e. biofuels or RCFs), or PtL fuels made using low carbon electricity (renewable or nuclear). SAF produced from food, feed or energy crops is not currently eligible. A Call for Evidence (CfE)⁹ was published in 2025 to seek feedback on the eligibility of crops in the SAF Mandate. The CfE is intended to inform areas such as feedstock availability, industrial development, sustainability and regulation. Any future changes to eligible feedstock under the SAF Mandate would be subject to consultation.

For the Mandate, SAF must achieve a minimum lifecycle GHG emissions reduction of 40% compared to a fossil fuel comparator of 89gCO₂e/MJ. This threshold, which differs from the RTFO's 65% threshold, has been set with the intention of promoting a diversity of SAF feedstocks and conversion technologies within the UK market and to increase the carbon abatement options available for fuel suppliers to meet their SAF Mandate obligations. It is anticipated that in some cases the carbon intensity of SAF will decrease over time through the decarbonisation of the electricity grid and supply chains, as well as the optimisation of production processes and the adoption of carbon capture, usage and storage (CCUS) in reducing emissions of some of the SAF pathways. The fossil fuel comparator used in the SAF Mandate Order of 89gCO₂e/MJ also differs from the one used in the RTFO Order as it more accurately reflects baseline emissions of aviation fossil kerosene.¹⁰

To demonstrate compliance with their obligations under the SAF Mandate, fuel suppliers can either use certificates or pay a buy-out price. The ability to trade certificates with other parties provides flexibility to those suppliers that cannot otherwise meet their obligations and acts as an additional incentive for suppliers who are able to meet their obligations since excess certificates can be sold on. The price of these certificates will be set by the market. The SAF Mandate buy-out price operates as a maximum cost for SAF per litre and is intended to provide a sufficiently high incentive to supply SAF into the UK market over the use of buy-out.

The way in which SAF lifecycle emissions reductions are achieved varies by feedstock. Where biomass is used to produce biofuels, carbon absorbed from the atmosphere during the lifecycle of the biomass is assumed to be equal to that emitted upon fuel combustion. This achieves

⁹ [SAF Mandate: crop-derived SAF - GOV.UK](#).

¹⁰ The fossil fuel comparator used by the SAF Mandate is in line with that used by CORSIA, which was determined based on a global average value for aviation. Further detail can be found here: https://www.icao.int/sites/default/files/environmental-protection/CORSIA/Documents/SCS-Evaluation/CORSIA_Supporting_Document_CORSIA-Eligible-Fuels_LCA_Methodology_V6.pdf.

emissions savings compared to fossil fuels which permanently release carbon into the atmosphere that would otherwise be locked in the ground.

Where fossil wastes, such as the fossil portion of residual municipal solid waste or industrial waste gases, are used to produce RCFs, carbon savings are achieved when it is more efficient to process these into fuels than disposing of or treating them via conventional means such as energy from waste.

Where hydrogen is combined with CO₂ using low carbon (renewable or nuclear) power to produce PtL fuels, emissions savings are achieved through utilising carbon that would otherwise be emitted to, or is already in, the atmosphere.

The SAF Mandate is just one of several steps being taken by the UK Government to support SAF uptake in the UK. In January 2026, the UK Government published a consultation on a SAF revenue certainty mechanism, seeking views from industry on the indicative Heads of Terms and an allocation approach for the first round of contracts. This is in addition to a consultation published in October 2025 on the detailed design of a variable levy on aviation fuel suppliers to fund the scheme.¹¹ A revenue certainty mechanism will help de-risk SAF projects in the UK by addressing barriers to investment in a nascent market that is using innovative technologies. Such a mechanism will help provide greater certainty of future revenue and attract investment in commercial scale SAF plants within the UK.

The Advanced Fuels Fund (AFF) has allocated over £198m to support first-of-a-kind SAF production plants through the project pipeline to reach investment-ready stage and achieve commercial scale. Winners of the third competition window were announced on 22 July 2025, with 17 projects awarded a share of £63m over the current financial year.

Aviation in the UK ETS

Flights within the scope of the UK ETS are UK domestic flights, flights between the UK and Gibraltar, flights departing from the UK to the European Economic Area and flights departing from the UK to Switzerland. A number of flights are excluded, for example, humanitarian and state flights.

Following economic research that identified minimal carbon leakage and associated competitiveness risks for aviation under the current scope of the UK ETS, the Authority consulted¹² in 2022 on options for aviation free allocation and agreed to withdraw the aviation free allocation entitlement from 2026.¹³ In order to ensure that aircraft operators were able to prepare for the end of free allocation for aviation, the aviation free allocation entitlement continued to reduce at the fixed amount of 2.2% annually in 2024 and 2025 ahead of the end of free allocation for aviation in 2026.

¹¹ <https://www.gov.uk/government/consultations/saf-revenue-certainty-mechanism-levy-design>.

¹² Consultation: <https://assets.publishing.service.gov.uk/media/630f7bdae90e076ec81556cb/developing-uk-ets-consultation-government-response.pdf>.

¹³ Authority Response: <https://assets.publishing.service.gov.uk/media/649eb7aa06179b000c3f7608/uk-emissions-trading-scheme-consultation-government-response.pdf>.

Current treatment of SAF in the UK ETS

Under the UK ETS Order, aircraft operators can claim emissions reductions from eligible SAF such that their aviation emissions figure and the corresponding number of allowances they are required to surrender under the UK ETS are reduced. Eligible SAF is zero rated, meaning it is treated as if it produces zero emissions. Article 54 of the Monitoring and Reporting Regulation 2018 (M&RR 2018),¹⁴ as modified by the UK ETS Order, sets out the detailed rules.

Eligible SAF must currently be a biofuel and meet or exceed the sustainability criteria set out in the Schedule to the RTFO Order 2007 (the “RTFO sustainability criteria”). It must therefore make an emissions saving of at least 65% compared to a fossil fuel comparator of 94gCO₂e/MJ (55% for older production plants).

Current eligibility and treatment of SAF in the UK ETS is summarised in the following table.

Current eligibility and treatment of SAF in the UK ETS

1) Eligible fuel types	Biofuels only
2) Sustainability criteria	RTFO sustainability criteria
3) GHG emissions saving threshold	65% (55% for older production plants ¹⁵)
4) Fossil fuel comparator	94gCO ₂ e/MJ
5) How SAF is recognised	Zero rated

As outlined, the existing RTFO criteria used by the UK ETS differ in some ways to the UK SAF Mandate criteria. This means that, in theory, under current regulations, some SAF that would be eligible under the SAF Mandate would not be eligible under the UK ETS for claiming emissions reductions.

Future treatment of SAF in the UK ETS

As outlined, the UK SAF Mandate came into effect on 1 January 2025 and is the UK’s key policy mechanism to secure demand for SAF, succeeding the RTFO’s support for SAF. We are consulting on potential updates to the five key aspects of UK ETS SAF policy, taking interactions with the SAF Mandate into account:

- 1) **Eligible fuel types:** the types of fuels that are eligible (including Recycled Carbon Fuels and Power-to-Liquid)
- 2) **Sustainability criteria:** the sustainability criteria that eligible SAF is required to comply with

¹⁴ <https://www.legislation.gov.uk/uksi/2020/1265/schedule/4/paragraph/27>.

¹⁵ This refers to plants at which the production of SAF was taking place on or before 5 October 2015.

- 3) **GHG emissions saving threshold:** the emissions savings eligible SAF is required to make compared to fossil kerosene
- 4) **Fossil fuel comparator:** the baseline emissions factor for fossil kerosene used, against which SAF emissions savings are measured
- 5) **How SAF is recognised:** how SAF is recognised, i.e. by how much aircraft operators can reduce their UK ETS aviation emissions and surrender obligations from SAF.

DfT analysis shows that it is a combination of DfT policies (SAF Mandate, AFF and RCM) which act as the primary drivers of SAF uptake, rather than the UK ETS itself. This consultation's consideration of each of the above five aspects does not therefore include impacts on the demand and supply of SAF.

1) Eligible fuel types

Per article 4(2A) of the UK ETS Order, only biofuels are currently eligible for claiming emissions reductions under the UK ETS. Biofuels are defined as liquid or gaseous fuel for transport produced from biomass. Biomass is defined as the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.¹⁶

Under the RTFO, crop-based biofuel is an eligible fuel. The EU's Renewable Energy Directive (RED II) also allows eligibility of SAF derived from cover crops (only). The SAF Mandate imposes strict sustainability criteria and SAF derived from crops is not currently eligible for support. It is therefore unlikely that significant quantities of crop-derived SAF will be supplied in the UK. If, as an outcome of this consultation, the types of SAF eligible under the UK ETS were to align with those eligible under the SAF Mandate, crop-based SAF would cease to be eligible under the UK ETS.

The SAF market is currently in its early stages of development and will be monitored closely to ensure policy keeps pace with technical and commercial developments. As outlined, DfT published a CfE to improve the evidence base on crop-based SAF production and ensure the SAF Mandate is designed effectively to meet its policy objectives. Any future change to feedstock eligibility, or any other design parameter of the SAF Mandate, would be subject to consultation ahead of legislative change.

With respect to other types of SAF, the Authority is committed to ensuring the treatment of SAF in the UK ETS reflects the development of the SAF market. Diversification of SAF feedstocks and technology pathways, including RCFs and PtL, supports a greater total supply of SAF, allowing the aviation sector to meet higher emissions reduction targets and achieve greater overall decarbonisation.

RCFs and PtL fuels are eligible for incentives under the SAF Mandate and are eligible under other carbon pricing schemes, such as the EU ETS. However, the UK ETS legislation's current alignment with the RTFO means that these fuels are currently treated as though they were fossil kerosene and are ineligible for emissions reduction claims under the UK ETS.

The Authority welcomes stakeholder views on the eligible fuel types under the UK ETS.

¹⁶ [Article 3\(21\) and \(22\) of the Monitoring and Reporting Regulation 2018](#), as modified by the UK ETS Order.

- 1. Do you have views on the eligible fuel types under the UK ETS, and whether these should align with the eligible fuel types under the UK SAF Mandate? This would include expanding the types of eligible SAF under the UK ETS to include non-biofuel low carbon fuels, such as power-to-liquid fuels and recycled carbon fuels. Please provide evidence and/or explain your answer where possible.**

2) Sustainability criteria

Under Article 54 of the Monitoring and Reporting Regulation 2018 (as modified by the UK ETS Order), for SAF to be eligible for an emissions reduction claim it must meet the RTFO sustainability criteria. The RTFO has been succeeded by the SAF Mandate for aviation fuels. There is therefore currently misalignment between UK policy affecting the supply and demand sides of the UK SAF market.

The sustainability criteria for SAF eligible under the SAF Mandate are set out in Schedule 1 (Sustainability Criteria), Schedule 2 (Land Criteria) and Schedule 3 (Forest Criteria) to the SAF Mandate Order.¹⁷

The Authority is considering whether to update UK ETS SAF eligibility rules so that SAF eligible for an emissions reduction claim would need to comply with the SAF Mandate's sustainability criteria outlined in Schedule 1 of the SAF Mandate Order.¹⁸

Further decisions on specific aspects of this change, such as the level at which the GHG emissions saving threshold is set, are outlined in this consultation.

The Authority welcomes stakeholder views on the sustainability criteria SAF must comply with to be eligible under the UK ETS.

- 2. Do you have views on the sustainability criteria that SAF eligible for claiming emissions reductions under the UK ETS should meet, and whether this should be aligned with the sustainability criteria set out in the SAF Mandate Order? Please provide evidence and/or explain your answer where possible.**

3) GHG emissions saving threshold

The UK ETS Order currently requires that eligible SAF must meet the RTFO sustainability criteria and therefore make an emissions saving of at least 65% across its lifecycle compared to a fossil fuel comparator of 94gCO₂e/MJ. The UK SAF Mandate threshold differs in that it is set at 40% compared to a more accurate fossil fuel comparator of 89gCO₂e/MJ (based on the global average value for aviation).¹⁹ The lower GHG emissions saving threshold established by the SAF Mandate is intended to promote a diversity of SAF feedstocks that are sustainable

¹⁷ <https://www.legislation.gov.uk/ukxi/2024/1187/contents/made>.

¹⁸ <https://www.legislation.gov.uk/ukxi/2024/1187/made>.

¹⁹ More information can be found here: https://www.icao.int/sites/default/files/environmental-protection/CORSIA/Documents/SCS-Evaluation/CORSIA_Supporting_Document_CORSA-Eligible-Fuels_LCA_Methodology_V6.pdf.

within the UK market and to increase the carbon abatement options available for fuel suppliers to meet their SAF obligation.

The minimum GHG emissions saving threshold for SAF eligibility differs considerably across global carbon pricing schemes and SAF mandates, ranging from 10% to 65%. Two options for the GHG emissions saving threshold for SAF eligibility in the UK ETS are explored in this subsection: maintaining the 65% threshold or aligning with the UK SAF Mandate 40% threshold.

Changing the current (RTFO) threshold of 65% used by the UK ETS could impact the number of claims made by aircraft operators under the UK ETS for emissions reductions from SAF.

i) Maintaining the 65% threshold

Maintaining the 65% threshold would mean the UK SAF Mandate (which obligates fuels suppliers) and the UK ETS (to which aircraft operators are subject) would have different requirements. This would mean that some SAF supplied under the Mandate could be ineligible for the purposes of reducing surrender obligations under the UK ETS which could create confusion in the market given different standards would be applied across the UK supply chain.

It would however mean that the UK ETS would continue to have the same threshold as the EU ETS. Under the EU ETS, an operator can claim emissions reductions from SAF and therefore reduce its surrender obligations if it makes at least a 65% GHG emissions saving against a fossil fuel comparator of 94gCO₂e/MJ. Maintaining the same threshold as the EU ETS could help to minimise complexity associated with claiming emissions reductions from SAF for aircraft operators with obligations under both schemes.

The Authority anticipates that maintaining the 65% threshold would result in fewer claims for emissions reductions from SAF when compared to lowering the threshold to 40%, meaning operators would need to purchase more UK ETS allowances to meet their obligations. However, these effects are expected to be minimal and to only have a material impact in the medium term.

ii) Aligning with the UK SAF Mandate 40% threshold

Aligning the UK ETS with the SAF Mandate threshold would mean lowering the emissions saving threshold of eligible SAF from 65% to 40%. Although in isolation this could be considered to decrease the environmental stringency of UK ETS SAF policy, a 40% threshold would support the objective of enabling a diversity of SAF feedstocks within the UK market, increasing the carbon abatement options available for aircraft operators. The Authority is seeking to ensure that setting a minimum GHG emissions savings threshold does not unnecessarily exclude certain types of fuels or feedstocks that could still achieve significant GHG emissions savings compared to fossil kerosene. This is particularly relevant to the uptake of RCFs.

The environmental benefits of RCFs are realised when the conversion of feedstock to RCFs delivers greater carbon savings compared to the counterfactual use. However, RCFs typically deliver the lowest GHG emissions savings among types of SAF since the overall emissions of RCFs are currently relatively high. Emissions of RCFs are calculated as a sum of the emissions of production, transport and distribution, and the emissions of displaced energy from a counterfactual process, such as energy to waste of heat for cement kilns. Over time however, it is anticipated that the production, transport, and distribution emissions of RCFs will decrease as supply chains and processes are optimised. As electricity grids in the UK and

overseas decarbonise, it is expected that the emissions associated with displaced energy will also decrease significantly. This means that RCF production plants will have the capability to increase their GHG emissions reductions without any specific action or investment required.

A 40% threshold could help to support the development of RCFs, driving down their overall cost and promoting investment into their development, because it would allow for RCF derived SAF to be recognised under the UK ETS.

If the UK ETS was to adopt the SAF Mandate threshold, this would similarly enable the scheme to recognise the abatement potential of RCFs, helping to support cost effective decarbonisation. If the 65% threshold was maintained, RCFs would continue to be ineligible for emissions reduction claims under the UK ETS in the short-medium term, only meeting the eligibility of the scheme much later in their development once their emissions savings have grown. As outlined, a combination of DfT policies is expected to be the primary driver of SAF uptake. However, maintaining the 65% threshold could have a marginal limiting effect on aircraft operators' uptake of RCFs in the short-medium term.

Adopting the SAF Mandate threshold would also ensure alignment between the UK ETS and the UK SAF Mandate, which could simplify the process for claiming emissions reductions from UK supplied SAF for both aircraft operators and regulators. In particular, the Authority anticipates that suppliers' SAF Mandate proof of compliance could be used by aircraft operators to evidence claims under the UK ETS.

Given these considerations, the Authority anticipates that, if we were to adopt the UK SAF Mandate sustainability criteria, a policy package that would include the SAF Mandate's 40% threshold would be simpler to implement given the threshold is established through the sustainability criteria.

The Authority welcomes stakeholder views regarding the GHG emissions saving threshold for SAF eligible for emissions reduction claims in the UK ETS, and whether a 65% or 40% threshold would be preferable.

- 3. Do you prefer a GHG emissions saving threshold of 65% or 40% for SAF eligible for emissions reduction claims under the UK ETS? Please provide evidence and/or explain your answer where possible.**
- 4. Do you have any other views on the potential to change the UK ETS SAF GHG emissions saving threshold? Please provide evidence and/or explain your answer where possible.**

4) Fossil fuel comparator

As outlined above, the current fossil fuel comparator against which SAF emissions savings are measured is 94gCO₂e/MJ (per the RTFO sustainability criteria). This comparator is also used by the EU ETS. A comparator of 89gCO₂e/MJ is used under the SAF Mandate as it more accurately reflects baseline emissions of aviation fossil kerosene. This comparator is also used by ICAO for the purposes of lifecycle emissions savings calculations of CEF. If the UK ETS fossil fuel comparator was changed to the SAF Mandate figure, this would lower the assumed GHG emissions of fossil kerosene against which emissions savings from SAF would be calculated with respect to eligibility under the UK ETS.

In considering alignment across UK policy and the accuracy of baseline emissions of aviation fossil kerosene, the Authority is considering whether to adopt the UK SAF Mandate fossil fuel comparator of 89gCO₂e/MJ.

The Authority welcomes stakeholder views on the fossil fuel comparator, against which SAF emissions savings are measured, to be used for SAF eligible in the UK ETS.

5. Do you have views on the fossil fuel comparator, against which SAF emissions savings are measured, to be used for SAF eligible in the UK ETS, including whether the UK ETS Authority should adopt the fossil fuel comparator of 89gCO₂e/MJ in line with that of the SAF Mandate? Please provide evidence and/or explain your answer where possible.

5) How SAF is recognised

Eligible SAF is currently zero rated under the UK ETS meaning allowances do not need to be surrendered in respect of emissions from the combustion of SAF.

However, in practice, no SAF achieves 100% emissions reductions. The combustion of SAF does emit CO₂, in similar amounts to that released when fossil kerosene is burned. The level of net emissions savings from SAF varies and comes from savings made throughout the fuel's lifecycle. Factors such as the type of feedstock the SAF is made from, the production process and how the fuel is transported will all affect the lifecycle emissions savings of SAF.

An alternative approach to zero rating would be to recognise SAF using a lifecycle assessment approach, whereby SAF would be recognised in proportion to the actual emissions savings made. These two options, zero rating and a lifecycle assessment approach, are explored in this section.

As outlined, a combination of DfT policies is expected to be the primary driver of SAF uptake. The considerations in this subsection therefore do not include impacts on the demand and supply of SAF.

However, depending on final Authority policy decisions, the future treatment of SAF under the UK ETS could impact the number of claims made for emissions reductions from SAF, and therefore the demand for UK ETS allowances. This would impact costs to aircraft operators and government revenue. These impacts are explored in the Policy packages section below.

i) Zero rating

Zero rating SAF under the UK ETS helps to absorb some of the cost differential between SAF and fossil kerosene, to a greater extent than a lifecycle assessment approach would. All other things being equal, continued zero rating would mean lower costs to operators compared to a lifecycle assessment approach.

Eligible SAF under the EU ETS is also currently zero rated, and 20 million EU ETS allowances were reserved to support the uptake of alternative fuels.

Continuing with zero rating would not require changes in order to implement and regulate the approach and would maintain the simple calculation required to determine the reduction in aviation emissions and therefore surrender obligations. This approach would also not require

changes to the 'Manage your UK ETS reporting' (METS)²⁰ system with respect to calculating the reduction in an operator's surrender obligations.

However, the Authority also recognises that zero rating does not reflect the true CO₂ impact of the combustion of SAF. In addition, zero rating does not differentiate between different types of SAF with higher or lower emissions saving attributes. Maintaining the current UK ETS approach of zero rating SAF would continue to not reflect the actual emissions they produce.

Zero rating would be inconsistent with the approach taken by the UK SAF Mandate, under which suppliers are issued with certificates in proportion to the GHG emissions savings of a given SAF consignment. Compared to a lifecycle assessment approach, in theory, zero rating would have a positive impact on SAF uptake given SAF would be rewarded to a greater extent. However, this impact is expected to be marginal given it is a combination of DfT policies that is expected to be the primary driver of SAF uptake.

Zero rating would also represent a different approach to that taken under CORSIA, which the UK supports as the globally agreed framework for addressing international aviation emissions. An aeroplane operator can reduce its CORSIA offsetting requirements by claiming emissions reductions from CEF. CEF emissions reductions are calculated based on the GHG lifecycle emissions value of the fuel.

ii) **Lifecycle assessment approach**

A lifecycle assessment approach would represent a shift from current practice and would mean that SAF would be recognised in proportion to the actual emissions savings being made across the fuel's lifecycle compared to fossil kerosene. This approach would therefore align more robustly with the 'polluter pays' principle than zero rating. Aircraft operators would be able to reduce their UK ETS surrender obligations to a greater extent from SAF offering higher emissions savings. All other things being equal, this would encourage the purchase of SAF with higher emissions savings. However, this impact is expected to be marginal in the short-medium term given that advanced fuel production technologies capable of delivering higher lifecycle emissions savings are still emerging and not yet available at scale.

A lifecycle assessment approach would help to absorb some of the cost differential between SAF and fossil kerosene, but to a smaller degree than zero rating (at least in the short term, given no SAF on the market currently makes an emissions saving of 100%). All other things being equal, a lifecycle assessment approach would, relative to zero rating, increase costs for operators claiming emissions reductions from SAF.

A lifecycle assessment approach would align with the approach taken by the UK SAF Mandate, which incentivises cost-effective GHG emissions reductions and minimises the risk that the SAF mixture will be primarily made up of lower cost SAF that achieves fewer GHG emissions reductions. It would also represent an approach similar to that of CORSIA but would differ from the approach taken by the EU ETS.

If the Authority were to adopt a lifecycle assessment approach, aircraft operators would need to provide evidence of SAF lifecycle emissions savings. The Authority would consider which

²⁰ METS is the UK Government's official online service used by operators, regulators, and verifiers to manage obligations under the UK Emissions Trading Scheme (UK ETS) and CORSIA.

methodologies would be accepted for calculating the emissions savings of eligible SAF but would seek to avoid being overly prescriptive.

A lifecycle assessment approach would be somewhat more complex to implement and administer since changes to METS would likely be required. This approach could also increase the administrative burden for operators, for example, since additional information may be required to evidence the SAF lifecycle emissions savings to determine the reduction in UK ETS surrender obligations.

The Authority welcomes stakeholder views on how SAF is recognised and any preferences between zero rating and a lifecycle assessment approach.

- 6. Do you prefer a zero rating or lifecycle assessment-based approach to how SAF is recognised under the UK ETS? Please explain your answer.**
- 7. If the UK ETS Authority were to implement a lifecycle assessment-based approach to claiming emissions reductions from SAF in the UK ETS, do you have any views on which methodologies should be accepted for eligible SAF? Please explain your answer.**

Policy packages

The individual UK ETS SAF policy choices outlined in this consultation can be combined to produce a range of possible policy packages for the future treatment of SAF in the UK ETS.

To demonstrate how the available policy choices could work together, the Authority has brought together two similar policy packages for comparative purposes below. These packages are intended as examples and do not represent minded-to positions or Authority recommendations. These packages are outlined in the table below alongside the counterfactual and are then considered in more depth.

Other combinations of policy choices are possible, and the Authority encourages stakeholders to take the information contained within the preceding sections into account when considering potential combinations.

UK ETS Authority illustrative policy packages

	Counterfactual (do nothing)	Policy package 1	Policy package 2
1) Eligible fuel types	Biofuels only	Expand beyond biofuels	Expand beyond biofuels
2) Sustainability criteria	RTFO sustainability criteria	UK SAF Mandate sustainability criteria	UK SAF Mandate sustainability criteria

3)	GHG emissions saving threshold²¹	65%	40%	40%
4)	Fossil fuel comparator	94gCO ₂ e/MJ	89gCO ₂ e/MJ	89gCO ₂ e/MJ
5)	How SAF is recognised	Zero rated	Zero rated	Lifecycle assessment

Counterfactual (do nothing): Continue to only recognise biofuels, maintain the current threshold, and continue to zero rate SAF

The Counterfactual would represent a continuation of current practice. It is therefore used as the counterfactual in the accompanying analysis. Biofuels would continue to be the only eligible type of SAF and would need to make an emissions saving of at least 65% compared to a fossil fuel comparator of 94gCO₂e/MJ. Eligible SAF would continue to be zero rated.

- Since the Counterfactual would maintain current practice, all other things being equal, there would be no impact on operators’ costs or government revenues.
- This policy package would allow consistency for aircraft operators with respect to the current approach. However, it would mean the current misalignment between UK policy affecting the supply and demand sides of the UK SAF market would persist.
- Zero rating would mean that emissions savings from SAF would continue to not be accurately reflected.

Policy package 1: Recognise all types of SAF, fully align with the SAF Mandate sustainability criteria, and continue to zero rate

Under Policy package 1, the scope of eligible fuels would be expanded meaning that other fuel types, such as RCFs and PtL fuels, could also be recognised. By fully aligning with the SAF Mandate sustainability criteria, SAF would need to make an emissions saving of at least 40% compared to a fossil fuel comparator of 89gCO₂e/MJ. Eligible SAF would continue to be zero rated.

- The Authority expects this policy package to result in a small increase in the number of claims made for emissions reductions from SAF over 2025-2040, and therefore a small decrease in the number of allowances aircraft operators would be required to surrender compared to the Counterfactual.

²¹ All options have been analysed where the applicable threshold is compared to a fossil fuel comparator of 89 gCO₂e/MJ. If the UK ETS were to maintain the existing fossil fuel comparator of 94 gCO₂e/MJ, this would affect the impacts assessed but to a marginal degree.

- This would lead to a small reduction in costs to aircraft operators and a decrease in government revenue (in terms of the projected decrease in allowances purchased) compared to the Counterfactual (a decrease in gross UK ETS revenue of approximately 3% between 2025-2040).²²
- This policy package would mean UK policy affecting the supply and demand sides of the UK SAF market would be brought into alignment.
- Continued zero rating would be less complex to implement and administer compared to a lifecycle assessment approach. However, it would mean that emissions savings from SAF would continue to not be accurately reflected.

Policy package 2: Recognise all types of SAF, fully align with the SAF Mandate sustainability criteria, and recognise SAF on a lifecycle assessment basis

Policy package 2 would be equivalent to Policy package 1, except eligible SAF would be recognised based on its actual lifecycle emissions savings rather than zero rated.

- Similarly, the Authority expects this policy package to result in a small increase in the number of claims made for emissions reductions from SAF over 2025-2040, leading to a small reduction in costs to operators and a decrease in government revenue (in terms of the projected decrease in allowances purchased) compared to the Counterfactual (a decrease in gross UK ETS revenue of approximately 1% between 2025-2040).
- This policy package would mean UK policy affecting the supply and demand sides of the UK SAF market would be brought into alignment.
- Recognising SAF on a lifecycle assessment basis would better reflect the ‘polluter pays’ principle since SAF with greater emissions savings relative to fossil kerosene would result in a greater reduction to an operator’s surrender obligations.
- This policy package could also have a marginal, but positive, effect on encouraging the uptake of higher emissions saving SAF, given SAF would be recognised based on actual emissions savings.

The Authority welcomes stakeholder views on the policy packages outlined in this section.

8. Do you think Policy package 1 and/or Policy package 2 represent a suitable approach to recognising SAF under the UK ETS? Please explain your response.

9. Are there any further policy packages that you think would be more appropriate and should be considered by the Authority?

Operational issues

Purchase and delivery

An aircraft operator’s surrender obligations should reflect their aviation emissions during a given UK ETS scheme year. Claims for emissions reductions from SAF should therefore only

²² Note that these UKA values are modelled over the period 2025-2040, while the UK ETS allowance cap is only legislated up to (and including) 2030. This means the period 2031-2040 in our modelling uses an estimated post-2030 UK ETS cap in projections of UKA values. The estimated post-2030 cap is subject to change, which will have a resultant impact on projected UKA values.

be made with respect to an operator's activities within that scheme year. We therefore propose to clarify in legislation the timeframe for the purchase and delivery of SAF for which emissions reductions can be claimed.

The Authority however recognises that some flexibility is required with respect to this timeframe around the start and end of scheme years. For example, where SAF is used on a flight in January of a given scheme year, that SAF will most likely have been purchased in the preceding scheme year. Similarly, where a purchase of SAF is made in December of a given scheme year, that SAF may not be delivered until the following scheme year.

Clarifying the legal requirement to provide proof of purchase and delivery of SAF to an aerodrome fuelling system or aircraft would ensure that fuel will only be used by the aviation sector and would help to guard against double counting and potentially fraudulent claims.

The Authority is therefore minded to clarify in legislation that, for the purposes of claiming emissions reductions:

- a) SAF must have been purchased within, or at most three months prior to, the scheme year the claim relates to and delivered to an aerodrome fuelling system, or an aircraft, before 31 March of the year following the given scheme year; and
- b) Proof of purchase and delivery of SAF to an aerodrome fuelling system or aircraft must be provided to the UK ETS regulator.

10. Do you agree with the UK ETS Authority's proposal to clarify the legislative requirements on the purchase and delivery of SAF for the purposes of claiming emissions reductions under the UK ETS? Please provide evidence and/or explain your answer where possible.

Claim limits

As above, an aircraft operator's surrender obligations should reflect their aviation emissions during a given UK ETS scheme year. An aircraft operator therefore cannot claim emissions reductions from SAF greater than their total fuel use with respect to UK ETS aviation activity within any given scheme year. Additionally, emissions reductions from SAF can only be claimed to the extent of any UK ETS aviation activity. We propose to clarify these points in legislation.

With respect to whether claims can be carried over into a new scheme year, claims for emissions reductions from SAF should not be carried over, since an aircraft operator's surrender obligations in respect of a scheme year should reflect their emissions in that scheme year. We propose to clarify this in legislation.

The Authority is therefore minded to clarify in legislation that:

- a) The amount of SAF for which emissions reductions can be claimed in a given scheme year is limited to an aircraft operator's total fuel consumption with respect to its UK ETS aviation activities within that scheme year;
- b) Claims for emissions reductions from SAF cannot be carried over into subsequent scheme years.

11. Do you agree with the UK ETS Authority's proposal to clarify in legislation the limit on the amount of SAF for which emissions reductions can be claimed, and that claims for emissions reductions from SAF cannot be carried over into subsequent scheme years? Please provide evidence and/or explain your answer where possible.

Ensuring claiming emissions reductions from SAF only affects surrender obligations

The UK ETS Order²³ does not enable the claiming of emissions reductions from SAF to affect other aspects of the UK ETS, for example, it does not affect assessments determining whether airlines are exempt aircraft operators under articles 7 and 8, or their entitlement to use simplified reporting procedures under article 33(2). This means that an aircraft operator's exempt status and/or entitlement to simplified reporting procedures is determined on the basis of total annual emissions, which includes emissions from SAF. However, we consider that the UK ETS Order could be clearer on this point.

The aviation emissions figure net of the emissions reduction claim should only apply to determine the surrender obligation; for all other purposes the gross aviation emissions figure before any emissions reduction should apply.

The Authority is therefore minded to clarify in legislation that the aviation emissions figure taking into account the emissions reduction only applies for the purpose of determining the surrender obligation.

12. Do you agree with the UK ETS Authority's proposal to clarify in legislation that claiming emissions reductions from SAF only affects aircraft operators' surrender obligations?

Basis for a claim

The M&RR 2018, as modified by the UK ETS Order, outlines several options for the methodology and evidence required for claiming emissions reductions from SAF.

Article 54(2) M&RR 2018 as modified provides that, where biofuels are physically mixed with fossil fuels and delivered to an aircraft in physically identifiable batches, the biomass fraction should be determined on the basis of the standard and analytical methods in Articles 32 to 35 M&RR 2018. An operator can instead use the mass balance of fossil fuels and biofuels purchased where the Articles 32 to 35 method would incur unreasonable costs or are technically not feasible.

The Authority is therefore minded to change Article 54(2) to establish the proof of sustainability and the use of purchase and delivery records as the default method.

Note that if this change is implemented, the requirement of no double claiming will be retained. The avoidance of double claiming requires aircraft operators to ensure, and provide evidence, as required, to their verifier and the regulator, that no part of the SAF for which emissions reductions are claimed has been:

²³ <https://www.legislation.gov.uk/ukxi/2020/1265/schedule/4/paragraph/27>.

- Relied on by the aircraft operator to obtain an emissions reduction or a financial benefit in another regulatory scheme, such as CORSIA or the EU ETS;
- Transferred to another person.

13. Do you agree with the UK ETS Authority's proposal to change Article 54(2) M&RR 2018 as modified to establish the use of purchase records as the default method to evidence the claiming of emissions reductions from SAF?

Ensuring monitoring plan requirements apply to small emitters

Annex 1 of the M&RR 2018, as modified by the UK ETS Order, sets out minimum requirements for an aircraft operator's emissions monitoring plan. Requirements in relation to where an aircraft operator intends to claim emissions reductions from SAF under the UK ETS currently sit in the part of the Annex which only applies to aircraft operators who are not small emitters (in section 2, in point 2).

Since all aircraft operators are eligible to claim emissions reductions from SAF, the Authority is minded to amend the UK ETS Order such that these requirements apply to all aircraft operators.

14. Do you agree with the UK ETS Authority's proposal to amend the UK ETS Order such that emissions monitoring plan requirements that relate to claiming emissions reductions from SAF apply to all aircraft operators, not only those that are not small emitters?

Geographical limits

Under the UK ETS (and CORSIA), there are currently no restrictions on where SAF can be purchased or delivered, allowing aircraft operators to acquire SAF from regions outside the flight scope of the scheme. Only flights that depart from a UK aerodrome and arrive in an aerodrome in the UK, an EEA state, Gibraltar or Switzerland, and flights from a Gibraltar aerodrome to a UK aerodrome, are in scope of the UK ETS. Under the UK SAF Mandate, which applies to fuel suppliers rather than airlines, an eligible fuel must be supplied to aviation in the UK.

Eligible SAF also does not need to be attributed to flights within the UK ETS scope. This contrasts with the EU ETS, which requires that in order to support a claim for emissions reductions, eligible aviation fuel must be physically attributed to EU ETS flights on a per aerodrome basis, either by direct attribution whereby SAF is linked to specific EU ETS flights departing from that aerodrome, or, where this is not feasible, SAF uplifted at that aerodrome can be allocated proportionally across EU ETS departing flights based on CO₂ emissions.

The Authority is seeking views on the benefits and challenges of the absence of geographical limits under the UK ETS.

15. What implications does the absence of geographical limits on the purchase and delivery of SAF, and the flight scope on which claims can be made, under the UK ETS have on your operations in relation to the scheme? Please provide evidence and/or explain your answer where possible.

To help guide your response you may wish to consider:

- The risks and benefits of sourcing SAF from outside of the scheme's flight scope;
- Impacts on competitiveness, carbon accounting, and supply chain logistics;
- Whether aligning the approach of the UK ETS in regard to geographical limits with the approach taken under the EU ETS or UK SAF Mandate would support consistency or create challenges.

Please provide any further views on the implications of the lack of geographical limits on the purchase and delivery of SAF under the UK ETS.

Evidence issues

The Authority is aware that some airlines are facing challenges in accessing the documentation required to support successful claims for emissions reductions from SAF under the UK ETS, whilst also in some cases being charged additional supplier fees for SAF.

Authority officials are working to ascertain the cause of the issue related to accessing evidence from suppliers and consider how this can be addressed.

The Authority would like to gather any additional information and views stakeholders have on this issue to support an appropriate solution.

16. Do you have any information and/or views on the challenges some airlines are facing in accessing the required documentation for successful SAF claims under the UK ETS?

17. Do you have any suggestions for appropriate solutions to the challenges faced?

Identification of an aircraft operator

The UK ETS Order makes modifications to the M&RR 2018 which applies to the UK ETS. This includes modifications to Chapter IV which outlines provisions for monitoring emissions from aviation. General provisions are covered in Article 51 of M&RR 2018²⁴, including with respect to the identification of aircraft operators.

The UK ETS Order currently states that Article 51 is to be read as if paragraphs 2 to 4 were omitted. This removes a reference for the identification of an aircraft operator, specifically that aircraft operators are to be identified by their call sign (where this is either the ICAO designator, or where this is not available, the registration markings of the aircraft).

The Authority understands that the provision enabling identification of aircraft operators via their call sign is helpful for regulators and industry. As such, the Authority is therefore minded to make an amendment to make it clear that this approach should be used when identifying an aircraft operator in accordance with article 6 of the UK ETS Order.

This amendment would provide that the aircraft operator is identified by their call sign (i.e. the ICAO designator) or, where not available, the registration markings of the aircraft; where this isn't known, then the owner of the aircraft is deemed to be the aircraft operator.

²⁴ [UK ETS technical guidance: Monitoring and Reporting Regulation \(MRR\) 2018 - GOV.UK](#)

18. Do you agree with the UK ETS Authority's proposal to provide that the aircraft operator is identified by their call sign (i.e. the ICAO designator) or, where not available, the registration markings of the aircraft; where this is not known, then the owner of the aircraft is deemed to be the aircraft operator?

Incorrect terminology

The Authority has identified an instance of incorrect terminology used in the UK ETS Order. Article 45(6) uses the term 'aviation operator' instead of the correct term 'aircraft operator'. The Authority is therefore minded to amend the UK ETS Order to such that the correct terminology is used.

19. Do you have any views on the UK ETS Authority's proposal to amend Article 45(6) of the UK ETS Order such that the correct term 'aircraft operator' is used?

Impacts on the Welsh language

The Welsh language is a strategic priority for the Welsh Government. Its Welsh Language Strategy, Cymraeg 2050: A million Welsh speakers, has two overarching targets: to reach a million Welsh speakers and to double the percentage of us that use Welsh every day by 2050.

The strategy is delivered across Welsh Government, spanning various policy areas such as housing, the economy, agriculture and education. As such, it is important that we assess the potential effects of proposed policy solutions on the Welsh language and the delivery of our Welsh Language Strategy.

We would like your views on how any proposed changes in relation to the treatment of SAF under the UK ETS could support our efforts to increase the number of people who speak and use Welsh, avoid any negative impacts, and ensure that we support the delivery of the Welsh Language Strategy.

20. What, in your opinion, would be the likely effects of changing the treatment of SAF in the UK ETS on the Welsh language? We are particularly interested in any likely effects on opportunities to use the Welsh language and on not treating the Welsh language less favourably than English.

- Do you think that there are opportunities to promote any positive effects?
- Do you think that there are opportunities to mitigate any adverse effects?

21. In your opinion, could changing the treatment of SAF in the UK ETS be formulated so as to:

- Have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English?
- Mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?

Consultation questions

- 1. Do you have views on the eligible fuel types under the UK ETS, and whether these should align with the eligible fuel types under the UK SAF Mandate? This would include expanding the types of eligible SAF under the UK ETS to include non-biofuel low-carbon fuels, such as power-to-liquid fuels and recycled carbon fuels. Please provide evidence and/or explain your answer where possible.**
- 2. Do you have views on the sustainability criteria that SAF eligible for claiming emissions reductions under the UK ETS should meet, and whether this should be aligned with the sustainability criteria set out in the SAF Mandate Order? Please provide evidence and/or explain your answer where possible.**
- 3. Do you prefer a GHG emissions saving threshold of 65% or 40% for SAF eligible for emissions reduction claims under the UK ETS? Please provide evidence and/or explain your answer where possible.**
- 4. Do you have any other views on the potential to change the UK ETS SAF GHG emissions saving threshold? Please provide evidence and/or explain your answer where possible.**
- 5. Do you have views on the fossil fuel comparator, against which SAF emissions savings are measured, to be used for SAF eligible in the UK ETS, including whether the UK ETS Authority should adopt the fossil fuel comparator of 89gCO₂e/MJ in line with that of the SAF Mandate? Please provide evidence and/or explain your answer where possible.**
- 6. Do you prefer a zero rating or lifecycle assessment-based approach to how SAF is recognised under the UK ETS? Please explain your answer.**
- 7. If the UK ETS Authority were to implement a lifecycle assessment-based approach to claiming emissions reductions from SAF in the UK ETS, do you have any views on which methodologies should be accepted for eligible SAF? Please explain your answer.**
- 8. Do you think Policy package 1 and/or Policy package 2 represent a suitable approach to recognising SAF under the UK ETS? Please explain your response.**
- 9. Are there any further policy packages that you think would be more appropriate and should be considered by the Authority?**
- 10. Do you agree with the UK ETS Authority's proposal to clarify the legislative requirements on the purchase and delivery of SAF for the purposes of claiming emissions reductions under the UK ETS? Please provide evidence and/or explain your answer where possible.**
- 11. Do you agree with the UK ETS Authority's proposal to clarify in legislation the limit on the amount of SAF for which emissions reductions can be claimed, and that claims for emissions reductions from SAF cannot be carried over into subsequent scheme years? Please provide evidence and/or explain your answer where possible.**
- 12. Do you agree with the UK ETS Authority's proposal to clarify in legislation that claiming emissions reductions from SAF only affects aircraft operators' surrender obligations?**

13. **Do you agree with the UK ETS Authority's proposal to change Article 54(2) M&RR 2018 as modified to establish the use of purchase records as the default method to evidence the claiming of emissions reductions from SAF?**
14. **Do you agree with the UK ETS Authority's proposal to amend the UK ETS Order such that emissions monitoring plan requirements that relate to claiming emissions reductions from SAF apply to all aircraft operators, not only those that are not small emitters?**
15. **What implications does the absence of geographical limits on the purchase and delivery of SAF, and the flight scope on which claims can be made, under the UK ETS have on your operations in relation to the scheme? Please provide evidence and/or explain your answer where possible.**

To help guide your response you may wish to consider:

- The risks and benefits of sourcing SAF from outside of the scheme's flight scope;
- Impacts on competitiveness, carbon accounting, and supply chain logistics;
- Whether aligning the approach of the UK ETS in regard to geographical limits with the approach taken under the EU ETS or UK SAF Mandate would support consistency or create challenges.

Please provide any further views on the implications of the lack of geographical limits on the purchase and delivery of SAF under the UK ETS.

16. **Do you have any information and/or views on the challenges some airlines are facing in accessing the required documentation for successful SAF claims under the UK ETS?**
17. **Do you have any suggestions for appropriate solutions to the challenges faced?**
18. **Do you agree with the UK ETS Authority's proposal to provide that the aircraft operator is identified by their call sign (i.e. the ICAO designator) or, where not available, the registration markings of the aircraft; where this is not known, then the owner of the aircraft is deemed to be the aircraft operator?**
19. **Do you have any views on the UK ETS Authority's proposal to amend Article 45(6) of the UK ETS Order such that the correct term 'aircraft operator' is used?**
20. **What, in your opinion, would be the likely effects of changing the treatment of SAF in the UK ETS on the Welsh language? We are particularly interested in any likely effects on opportunities to use the Welsh language and on not treating the Welsh language less favourably than English.**
 - Do you think that there are opportunities to promote any positive effects?
 - Do you think that there are opportunities to mitigate any adverse effects?
21. **In your opinion, could changing the treatment of SAF in the UK ETS be formulated or changed so as to:**
 - Have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English?
 - Mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?

Next steps

The responses to this consultation will be used to develop final policy decisions for the treatment of SAF under the UK ETS.

This consultation will be open for 12 weeks before closing. The Authority will then work through the responses and aim to publish the Authority Response in 2026, with a view to implement any changes by 2028.

Glossary

Biofuel	Biofuels are defined as liquid or gaseous fuel for transport produced from biomass; biomass is defined as the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste. ²⁵
Biomass	Organic plant or animal matter.
CORSIA	The Carbon Offsetting and Reduction Scheme for International Aviation.
Drop-in Fuel	A fuel which is functionally identical to another fuel, and can therefore be substituted into a fuel blend, usually to a maximum blend ratio.
Fossil Fuel Comparator	The emissions intensity of conventional aviation fuel, against which the emissions intensity of SAF is measured.
Greenhouse Gas (GHG)	Greenhouse gases exist in the earth's atmosphere and trap heat.
GHG Emissions Intensity	Mass of GHG emitted from a unit energy of fuel when burned, measured in gCO ₂ e/MJ.
GHG Emissions Savings	The amount of greenhouse gas emissions which have been reduced via a specific action or sequence of actions.
GHG Emissions Saving Threshold	The minimum percentage or volume of GHG emissions savings that fuels must make to be eligible under certain schemes.
Hydro-Processed Esters and Fatty Acids (HEFA)	A type of biofuel produced from oils and fats.
ICAO	International Civil Aviation Organization.
Lifecycle Assessment	Lifecycle assessments measure the amount of greenhouse gases that are produced, or saved, across the entire lifecycles of specific processes or products.
Lifecycle emissions savings	The amount of GHG emissions which have been reduced across the entire lifecycle of a given product or process.
Power-to-liquid (PtL)	A method of producing synthetic fuel which uses water, carbon dioxide and renewable electricity. PtL fuels are a type of SAF.

²⁵ Article 3(21) and (22) of the Monitoring and Reporting Regulation 2018, as modified by the UK ETS Order.

Recycled Carbon Fuel (RCF)	A type of SAF produced from recycled components of fossil origin.
RED II	The EU Renewable Energy Directive.
Renewable Fuel of Non-Biological Origin (RFNBO)	Renewable liquid or gaseous transport fuels for which none of the energy content of the fuel comes from biological sources.
Renewable Transport Fuel Obligation (RTFO)	The RTFO regulates renewable fuels used for transport. Suppliers must supply a certain volume of renewable fuel as part of their total fuel sales.
Sustainable Aviation Fuel (SAF)	SAF is a sustainable drop-in aviation fuel which can be used in place of, or mixed with, traditional fossil kerosene.
UK SAF Mandate	The SAF Mandate is the UK's key policy mechanism to secure demand for SAF and came into force on 1 January 2025, succeeding the RTFO's support for SAF. It delivers GHG emissions savings by encouraging SAF supply within the aviation industry. The current target is 2%, rising to 10% in 2030 and 22% in 2040.
Sustainability Criteria	A set of criteria which fuels must meet to be considered an eligible fuel under a given scheme.
Synthetic Fuels	Artificially produced fuels with the same properties as conventional fossil fuels.
UK ETS	This is a common abbreviation for the UK Emissions Trading Scheme.
UK ETS Authority	The Authority consists of the: UK Government, Scottish Government, Welsh Government and Department of Agriculture, Environment and Rural Affairs for Northern Ireland.
Zero rating	SAF is treated as if it produces zero emissions under the UK ETS; operators are not required to surrender any allowances for the mass of SAF claimed.

This publication is available from: www.gov.uk/government/consultations/uk-emissions-trading-scheme-treatment-of-sustainable-aviation-fuel

Any enquiries regarding this publication should be sent to us at:
ukets.consultationresponses@energysecurity.gov.uk

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