Department for Transport

Government response to the consultation on Sustainable Aviation Fuels Revenue Certainty Mechanism

Revenue certainty options to support a sustainable aviation fuel industry in the UK

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Department for Transport
Great Minster House
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London
SW1P 4DR

This publication is also available on our website at www.gov.uk/government/organisations/department-for-transport

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Ministerial foreword

This government is committed to taking action to address climate change. Decarbonising transport directly supports the government's mission to make Britain a clean energy superpower and will accelerate our journey to net zero. Delivering greener transport is also one of my five priorities.

Aviation is expected to become one of the largest emitters of greenhouse gases in the UK by 2050. I am committed to confronting this challenge head on and want to accelerate the transition to a greener aviation sector. Sustainable aviation fuel (SAF) will play an important part in reducing emissions from aviation and is already being used in aircraft today. The SAF Mandate, in place since 1st January 2025, will drive demand for SAF in the UK, deliver emission reductions up to 2.7 MtCO2e in 2030 and up to 6.3 MtCO2e in 2040.

I understand that uncertainty around the future revenue of SAF plants is limiting investment in UK SAF production. A revenue certainty mechanism will help to address this uncertainty. It will incentivise investment in UK SAF production, helping to drive growth across the UK, secure the supply of UK-made SAF, and maintain the UK's position as a global leader on SAF. This will also help deliver on our manifesto pledge, to secure the UK aviation industry's long-term future, through promoting sustainable aviation fuels and encouraging airspace modernisation.

This consultation response confirms that the Revenue Certainty Mechanism will take the form of a Guaranteed Strike Price (GSP). This will drive investment in SAF plants across the UK by providing confidence and certainty to investors. The GSP is the option that offers the highest level of confidence for investors. The scheme will be built on the established precedent of contracts for difference schemes, providing a clear and transparent claim process for industry and specifically targeted at UK SAF plants.

In 2050, up to 15,000 jobs and £5bn GVA in the UK could be supported with future low carbon fuel production for the domestic and international markets.[1] The Revenue Certainty Mechanism, along with the government's modern industrial strategy, will provide a launchpad for this sector to drive growth and investment.

The UK is already making progress. 97 million litres of SAF were supplied in the UK in 2023, double the amount of the previous year. However, much greater volumes of SAF will be required to ensure that 10% of UK aviation fuel is SAF by 2030, and 22% by 2040, as required by the government's SAF Mandate. Through the Revenue Certainty Mechanism, alongside the Advanced Fuels Fund which is extended for a further year with an additional £63m of funding, we will address barriers to the production of SAF in the UK and help realise the full potential of this technology.

The Rt Hon Heidi Alexander MP
Secretary of State for Transport

[1] Figures taken from research carried out by Ricardo for DfT in 2024 as part of the Net Zero Transport Growth Opportunities and Impacts Programme. This research will be published on gov.uk in due course.

Executive Summary: Overview of consultation proposals and the Government's response

The need for implementing a revenue certainty mechanism

The consultation presented the details of the challenge, the case for intervention, and a vision for a UK SAF industry that sees the UK capture its share of the global SAF market, by playing a leading role in its development, production, and use. This is covered in Section 2 Strategic Context in this response. The consultation also outlined how a revenue certainty mechanism could address key barriers to projects reaching Financial Investment Decision (FID) in the UK. These barriers are:

- There being no clear UK or global market price for advanced (non-hydrotreated esters and fatty acids (HEFA)) SAF;
- Policy and regulatory uncertainty; and
- Projects competing for finance with other emerging low carbon technologies.

This government has committed to delivering a revenue certainty mechanism to support a UK SAF industry.

The Revenue Certainty Mechanism will be industry funded. We will consult on this issue shortly and will engage with industry on other detailed issues, such as contract allocation.

Scope of feedstocks and technologies

Although no final position was outlined on specific feedstocks and technologies supported by a SAF revenue certainty mechanism, the second question focused on the parameters of the technologies supported, in particular, whether the scheme should support projects which produce HEFA-based SAF.

Due to the comparative maturity of HEFA-based SAF, and the current supply and availability of HEFA fuel, we confirm the intention is for the first tranche of signed contracts (under a revenue certainty mechanism) to be with UK SAF projects that produce using non-HEFA technology and feedstocks.

Revenue Certainty Mechanism options

The mechanics of the four shortlisted Revenue Certainty Mechanism options offered respondents the opportunity to say whether they agreed with the definition of each option or wished to suggest further considerations for each mechanism's design.

There are further details in the relevant sections, but responses broadly agreed with the definition of the options.

Options assessment

Each mechanism was subject to a multi-criteria assessment against a series of sub-principles derived from the overarching principles: investability, affordability and deliverability. The scoring outcomes were presented in the publication and the GSP received the highest overall score – and the highest score in investability and affordability. The consultation identified the GSP as the preferred mechanism to be progressed.

Following this consultation, we intend to proceed with a GSP. The GSP offers the highest level of confidence for investors, can be built on the established precedent of contracts for difference schemes, provides a clear claim process, and can be targeted at UK SAF plants.

Further detailed contract considerations

The consultation also included questions on a range of more detailed considerations, including contract details, allocation method and the counterparty.

We recognise that Revenue Certainty Mechanism contracts will be complex, and the design process will need to take into account the different situations of SAF plants based on their production pathways, scale and financial situation. It is vital that the Revenue Certainty Mechanism strikes a balance between investor confidence, value for money and deliverability, and we will continue to work closely and transparently with stakeholders to achieve this.

We also recognise that there are significant advantages and disadvantages to the different contract allocation methods that could be used by a revenue certainty mechanism. There will also be distinct challenges facing contract allocation for the Revenue Certainty Mechanism because of the relative nascency of the market, the challenge of price discovery and the range of SAF production pathways. We will continue to work closely with stakeholders to develop a robust and effective allocation process that can be delivered as soon as is practicable.

The government acknowledges that, for the Revenue Certainty Mechanism, to be effective the counterparty will need to be backed by government. The government notes the clear view of a majority of respondents to the consultation that the Low Carbon Contracts Company (LCCC) should be the Revenue Certainty Mechanism counterparty.

Introduction

In this publication, we summarise the responses received to each of the 16 questions in a consultation, published on 25 April 2024, on the design and implementation options of the UK SAF industry Revenue Certainty Mechanism.

This government response outlines the consultation proposals, provides a high-level summary of the stakeholder responses to the consultation questions, highlights some of the key comments from respondents on the proposed revenue support regulations, and provides the government's response to each individual question.

Stakeholders responded to the consultation questions with a formal submitted response via email. Where respondents did not structure their responses around the specific questions posed, the government has considered those responses by reference to the consultation question/position that they are considered most applicable to.

Responses to each of the consultation questions were analysed individually, before being grouped into clear themes, then summarised and anonymised. Responses that did not explicitly express their support or disapproval for the specific question were logged but classified as neither supportive nor non-supportive. Where information provided by a respondent related to a different question, we have summarised it under that other question.

Throughout this document we have used the following terminology:

- 'Majority' indicates the view of more than 50% of respondents in response to that question.
- 'Minority' indicates the view of fewer than 50% of respondents in response to that question.
- 'About half' indicates an overall response within a few percentage points of 50% (either way).
- 'Many respondents' indicates more than 70% of those answering the particular question.
- 'A few respondents' means fewer than 30%.
- 'Some respondents' refers to the range in between 30% and 70%.

We would like to thank all stakeholders for their time and contribution in responding to the consultation. Since the conclusion of the consultation period, we have carefully considered all responses and evidence provided to each question.

The government is committed to implementing a revenue certainty mechanism and, following this consultation, we intend to proceed with the option of a GSP to deliver the Revenue Certainty Mechanism. The GSP offers the highest level of confidence for investors, provides a clear claim process and can be targeted at UK SAF plants. The Revenue Certainty Mechanism will be industry funded and we will be consulting on this issue shortly.

We are also committed to continuing to work closely with industry and other stakeholders as we develop revenue certainty contracts and an allocation method as well as on the details of scheme administration.

Responses received

A total of 74 responses were received from a range of organisations and individuals concerning the government's proposals. The summary contained in this document describes the key themes set out in responses. For the sake of brevity, it does not repeat the full details contained in every response.

The following table provides a breakdown of those who responded. To note, some responses counted as one formal response were provided jointly by multiple organisations.

Stakeholder group	Number respondents
Academia/think tank	2
Airlines	8
Airport	3
Consultancy	1
Energy company	4
Feedstock supplier	3
Fuel supplier	3
Government owned private company	1
Investor/bank	4
NGO	1
Oil major	3
Original equipment manufacturer	4
SAF producer	14
Trade association/body	23
Total	**74**

1. Strategic context

The need for implementing a revenue certainty mechanism

Consultation proposal

There are several reasons why revenue certainty remains a key barrier to projects attaining the investment required to reach financial investment decision (FID) in the UK. The three main factors presented in the consultation were 1. no clear UK, nor global, market price for advanced (non-HEFA) SAF; 2. protection against future policy and regulatory uncertainty; and 3. UK SAF projects competing for finance with other emerging low carbon technologies. A revenue certainty mechanism aims to support the de-risking of projects to help attract the necessary financing and long-term funding from the investment and lending community.

Question 1

Does this rationale for implementing a revenue certainty mechanism match your understanding? If not, why not?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	No Comment
74	56	7	3	8

The majority of respondents agreed that a revenue certainty mechanism should be introduced, with the main argument for this being the challenges associated with securing investment. A revenue certainty mechanism would derisk the revenue risk associated with the lack of clarity for UK or global trading prices for advanced SAF.

Respondents also agreed that a revenue certainty mechanism, depending on mechanism type and design, will help address any threat of changes to regulatory frameworks. A common point raised was that a revenue certainty mechanism must be an opt-in scheme, which supports the approach of progressing a private law contract option (covered in question nine). Some used the opportunity to ask for further clarity on the funding mechanism for the scheme. Some stressed the importance of considering how such a scheme would comply with subsidy control – both domestic and international frameworks.

Important strands not explored in-depth by the consultation include specific cross-government interactions, such as alignment with the UK's frameworks and vision for carbon capture, use and storage (CCUS) and hydrogen production. Respondents emphasised that the incentive/subsidy of a revenue certainty mechanism option should not distort other low carbon sectors, for example, feedstock providers redirecting significant capacity to SAF and away from low carbon fuels needed to decarbonise other modes of transport.

Government response

The primary objectives of the Revenue Certainty Mechanism are to realise the economic benefits associated with a growing domestic SAF industry, help secure the supply required to meet the demand generated by the UK SAF Mandate and establish the UK as a global leader in the decarbonisation of a hard to abate sector.

A range of different stakeholders stated that a revenue certainty mechanism is needed for a UK SAF industry. We agree with the view of industry that a revenue certainty mechanism will help overcome challenges associated with bringing forward investment in SAF plants, such as the nascent market having no clear UK nor global market price for advanced (non-HEFA) SAF and projects competing for finance with other emerging low carbon technologies.

As outlined in response to question 11, the government will proceed with the GSP option for the Revenue Certainty Mechanism. This mechanism will involve private law contracts between a government-backed counterparty and fuel producers. Therefore, we can reassure some respondents that producers will be able to choose whether or not to apply to enter into contract with the counterparty.

The issue of funding was also raised. The Revenue Certainty Mechanism will be industry funded; we will be consulting on this issue shortly.

Throughout several questions, the scale of the support was raised. We understand there is a critical need for projects, investors, lenders and the wider supply and user chain to understand the eligibility criteria and the quantity of available contracts as soon as possible for business planning and viability. Development is an ongoing process and once details are finalised, we will publicly share information.

The precise design of the GSP will determine the outcome of the subsidy control assessment when examining interactions between domestic and international frameworks, such as World Trade Organisation (WTO) obligations. This will ensure multiple incentives do not lead to issues related to double counting from stacking subsidies or distorting other sectors by increasing the purchasing power of SAF as an offtaker.

Government decision: we are committed to delivering a revenue certainty mechanism to support a UK SAF industry.

2. Scope

HEFA-based SAF

Consultation proposal

The UK SAF Mandate and the Advanced Fuels Fund (AFF) both seek to provide support to advanced fuel technologies, to allow them to develop alongside HEFA-based SAF. The consultation outlined how our current approach to a revenue certainty mechanism has focused on non-HEFA pathways for SAF production as these technologies – unlike HEFA - are not yet commercially available.

The SAF Mandate introduces a HEFA cap set, as a proportion of the overall trajectory, at 100% in 2025 and 2026 decreasing to 71% in 2030 and 35% in 2040. This will create space for the development of new advanced SAF technologies and encourage investment in them while recognising the critical role HEFA will play in the UK SAF sector.

Question 2

Do you agree that HEFA-based SAF should not be covered by the proposed revenue certainty mechanism?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	No comment
74	31	7	18	18

A majority of respondents agreed that HEFA-based SAF should not be covered by the proposed revenue certainty mechanism. A third either chose not to answer the question or did not express a preference.

The main arguments raised for a revenue certainty mechanism not supporting HEFA-based SAF projects were based around the existing maturity of HEFA as a commercial technological pathway. Given the HEFA cap in the SAF Mandate, commercial scale advanced SAF plants will play a key role in decarbonising the UK's jet fuel and will be essential for jet fuel suppliers to meet their obligations to supply SAF under the UK's SAF Mandate. However, these fuels could require additional support in the form of a revenue certainty mechanism to come online. By contrast, HEFA-based SAF has greater trading data relating to global market prices, therefore investors have better insights into the revenue risks for HEFA-based SAF projects. Other reasons suggested for excluding HEFA SAF projects included the UK's supply and availability of HEFA feedstocks. HEFA feedstocks are a finite resource and there are competing demands across the globe from other modes of transport, particularly road fuel use. Going forwards, there will be increasing competition for their use in SAF as other countries' mandates and targets kick-in. New technology pathways will need to be developed that can unlock new feedstocks to supply SAF at scale and help us meet our decarbonisation goals. It was also suggested that prioritising non-HEFA SAF could enable power-to-liquid (PtL) SAF to underpin UK hydrogen production by providing a suitable offtaker.

Of those disagreeing with exclusion of HEFA-based SAF projects, the main themes included the risk of the UK SAF programme and aviation industry becoming competitively disadvantaged internationally as non-HEFA SAF plants could take longer to commercially produce the same volumes as HEFA-based SAF, leading to importation of SAF to meet the UK SAF Mandate obligations. It was also raised that HEFA-based SAF projects still suffer from the risk of regulatory change that a private law contract could rectify. There was a challenge to the rationale about the HEFA pathway distorting the feedstock supply for other modal biofuels as ground vehicles are transitioning to electrification so the demand for biodiesel will gradually decline reducing competition for feedstocks.

It should be noted that many of those who disagreed with excluding HEFA-derived SAF suggested bucketing SAF technologies when it comes to contract allocation and price setting to protect and continue the support for non-HEFA projects and promote fairer competition.

Government response

It is important that we create space in the market for non-HEFA SAF. Some of these advanced SAFs could have the potential to achieve greater carbon savings. The long-term vision for HEFA derived SAF produced in the UK needs to be also framed by the potential challenges that government, industry and wider sectors have identified with the availability and accessibility of the HEFA feedstocks. This is particularly important when these feedstocks have demand across other modes of transport and energy and internationally, particularly as other countries SAF mandates and targets begin demand. This approach aligns with the strategy and mechanics of the UK SAF Mandate to diversify fuel eligibility for its obligations by introducing a cap on levels of HEFA-derived SAF.

We acknowledge that submitted views were not unanimous in calling for exclusion of revenue certainty mechanism support for HEFA-based SAF projects. However, the strategic case for excluding HEFA was seen as stronger overall. Once the delivery process approaches the contract allocation stage, we will publicise further information about eligibility criteria for application.

Responses suggested HEFA SAF projects experience challenges associated with the cost of production and price differential to fossil jet kerosene. The government has taken into account that HEFA is a maturer technological pathway with different risk profiles to advanced fuels. It also benefits from a (relative) greater availability of market prices and production at a proven commercial scale.

Although we do not feel that Revenue Certainty Mechanism support is required, we welcome HEFA production in the UK because of the carbon savings and economic benefits it brings, and we will continue to engage and work closely with this sector.

Government decision: Our intention is for the first tranche of contracts offered (under a revenue certainty mechanism) to be with UK SAF projects that produce using non-HEFA technology and feedstocks.

3. Revenue certainty mechanisms

Guaranteed Strike Price (GSP)

Consultation proposal

The consultation included an illustrative diagram of how the GSP option would operate. It also identified how revenue certainty would be secured, in addition to identifying the legislative basis and potential delivery timings. The key advantages and disadvantages were explored in a later section.

GSP requires a private law contract to be concluded between the SAF producer and a counterparty. The agreed strike price is set to ensure the producer can always achieve this level of price for each unit of SAF supplied. When the market price exceeds the strike price, the producer makes payments of the difference to the counterparty. Equally, when the market price falls the counterparty makes payments of the difference to the SAF producer.

Question 3

Do you agree with our explanation of the Guaranteed Strike Price mechanism? Is there anything else we need to consider?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	No comment
74	46	13	0	15

The majority of respondents agreed with the explanation provided of the GSP option, but this agreement and comments provided does not necessarily indicate a preference for the mechanism.

Several key areas for consideration were raised including the vision for the scheme’s scale, price setting, contract allocation (further explored in question 14), contract design and length.

On the reference price, more stakeholders supported using the achieved sales price, compared with other options, because of the use of real market data and the challenges associated with the other proxy alternatives.

The method for allocating GSP contracts will have an impact on setting the agreed strike price. However, there were suggestions to index the strike price to feedstock (or energy) costs, as well as inflation. One response suggested exploring the feasibility of linking prices to the fuel's carbon intensity (similar to how the reward of certificates is linked to GHG emission savings in the UK SAF Mandate).

One suggestion flagged that the revenues from co-products could be accounted for during price setting. Two responses recommended considering an annual auction to determine strike prices, although the counterparty would likely need to approach this by designing category pots for technologies and it would be resource intensive.

A private law contract mechanism, such as GSP, has the potential to lock in a price level over the medium-long term. The importance of mitigating the risk of embedding artificially high prices was emphasised. Respondents were clear that a strike price above the buy-out price for SAF Mandate certificates would be ineffective.

There was also interest in ensuring producers are sufficiently incentivised to negotiate to seek best prices via a price discovery ratio. This could operate similarly to the Hydrogen Production Business Model.

Some responses suggested taking an overarching approach to both the reference and strike price by structuring prices on GHG emissions, rather than volume supplied. This would attempt to prevent setting volume coverage that does not contribute to the wider decarbonisation strategies for aviation sector, such as the UK SAF Mandate. This could be achieved by designing a penalty into the contract for failing to meet GHG emission values.

As further explored in question 13, there was concern in how the funding mechanics for GSP would operate if there was an extended period of payments from the counterparty when the reference price levels fall below the strike price.

Wider interactions with regulatory frameworks are explored further in question 11, including compliance with subsidy control.

Government response

The majority of respondents agreed with the explanation of the GSP at least to a broad level. The reasoning behind progressing with the GSP option is further explored in question 9 and 10, along with contract design considerations.

The respondents have helped confirm our understanding that a significant amount of policy design needs to be undertaken in order to deliver a GSP-style option. We are keen to build on the work to introduce contracts for difference schemes in the renewables sector, but key differences between energy and fuel, such as the role of the national grid, call for new solutions. As we progress at pace, DfT will feedback to stakeholders in appropriate forums.

This explanation of a GSP mechanism focussed on the operating mechanics and how revenue certainty is achieved. However, we welcomed the valid strategic questions raised by respondents. Some of these included whether to base support around carbon savings and also the exact method for industry funding the revenue certainty mechanism.

We are committed to an industry-funded mechanism and to working closely with industry on how to achieve this.

We have collated many points for further consideration around the way that cost should be accounted for when setting a strike price. We will continue to engage with industry on the allocation process, including pricing and will be transparent in how the allocations work. Achieving a mechanism design that avoids disincentivising the pursuit of best prices will be essential and, as highlighted in the consultation, we will need to consider how a price discovery ratio or similar provision could ensure a competitive UK market.

The consultation presented the mechanics of a GSP and highlighted further work being needed to comprehensively establish how it would interact with business models in other low carbon industries. Many SAF producers will have business plans that differ greatly depending on the support under a SAF revenue certainty mechanism permitting subsidised inputs, such as hydrogen, biomethane and captured carbon. We recognise that clarity on this issue is vital for producers and we will provide further details, that are compliant with subsidy control rules, as soon as is practicable.

Government decision: responses to this question helped inform the evidence base to progress a GSP-style mechanism for implementation.

Buyer of Last Resort (BOLR)

Consultation proposal

The consultation explained how the BOLR mechanism works, how it provides revenue certainty and the main design considerations in the consultation.

BOLR requires SAF producers to enter into a private law contract with a counterparty, which guarantees the purchase of SAF Mandate certificates if the value of certificates falls below a certain price. The counterparty commits to buying the certificates at an agreed minimum price. A private law contract provides legal certainty to producers that they will receive a minimum price for their SAF certificates.

Question 4

Do you agree with our explanation of the Buyer of Last Resort mechanism? Is there anything else we need to consider?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	36	9	4	25

About half of the respondents agreed with the explanation of BOLR while a similar number of respondents did not specify an opinion. A few SAF producers stated that they favour the BOLR proposal.

Several concerns were raised on:

- Interaction with the SAF Mandate – how the certificate market will function when the BOLR mechanism has not been activated. On market price, it implicitly assumes that a common UK SAF Mandate price will exist in order to form the basis for that market price.
- Whether BOLR would qualify as a subsidy and its compliance with subsidy control rules – other World Trade Organisation (WTO) member countries could take countermeasures or commence WTO dispute settlement.
- Cost effectiveness – some did not see BOLR as the most cost-effective way to achieve a thriving UK SAF industry.

Government response

The consultation aimed to explore as many functional mechanism options as possible, in particular alternative options to a contracts for difference mechanism. BOLR would work by providing revenue certainty directly using the certificates awarded by the UK SAF Mandate.

Implementation of BOLR would face various challenges and ultimately, the case for a BOLR was undermined by lack of familiarity with this concept, the fact that certificates are awarded for the supply of SAF, not its production, and the potential challenge of pinning value to a certificates market with no historic trading data.

The government agrees that, comparatively to other mechanism options, the administrative complexity to design and operate BOLR was a fundamental reason to discount it and prefer a GSP-style option.

Our research also concluded that BOLR was unlikely to reach the same level of revenue certainty as a GSP and also would lack familiarity amongst not only producers, but the investment community.

As raised by many stakeholders, the direction of payments flows one-way therefore the underwriter's value for money during the upside is limited when compared with a GSP-style option.

Government decision: as explored further in question 10, the BOLR has not been progressed for implementation. We benefited from understanding the complexities of delivering a BOLR mechanism laid out by responses.

Mandate Auto Ratchet (MAR)

Consultation proposal

The SAF Mandate scheme will provide a significant incentive for the production and supply of SAF. SAF producers will receive price support for SAF via the mandate scheme either through:

- Earning certificates themselves, or
- The willingness of obligated parties to pay a premium for SAF over the cost of fossil kerosene. Or to pay directly for certificates, so that they can fulfil their obligations.

If the SAF Mandate targets are being exceeded by a certain level, then the Mandate Auto-Ratchet (MAR) mechanism automatically increases the Mandate obligation. This would ensure a balanced supply/demand of SAF and help maintain the price support that the mandate scheme is intended to provide.

MAR provides producers with more assurance that SAF certificates will retain their value in the long term and that the Mandate will provide sufficient price support.

Question 5

Do you agree with our explanation of the Mandate Auto Ratchet mechanism? Is there anything else we need to consider?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	37	7	2	28

Only one respondent disagreed with our explanation and the remaining responses were either agree or did not specify an answer.

Government response

This question sought stakeholder views on a reactive mechanism that would not exclude parties and could be delivered with a light touch delivery approach. We felt exploring and shortlisting a range of options was important.

By shortlisting two mechanism options that did not rely on the administrative considerations of a private law contract, we were able to investigate the preferences among stakeholders on the main priority - delivery speed or a higher degree of revenue certainty.

Question 7 further expanded on the rationale for not progressing options which involve amending the UK SAF Mandate.

Government Decision: Responses agreed with the definition of the MAR. As explored further in question 7, the MAR has not been progressed for implementation.

Mandate Floor Price (MFP)

Consultation proposal

This mechanism would introduce a minimum price at which SAF Mandate certificates may be sold. This could be introduced via an amendment to the SAF Mandate using the existing legislative powers under the Energy Act 2004.

Trading of SAF Mandate certificates would need to be monitored and measures put in place by the Administrator to prevent the sale of SAF Mandate certificates below a certain price.

By preventing SAF Mandate certificates from being sold below a certain price, SAF producers could in theory guarantee that they will receive a certain level of income from producing certified SAF.

Different SAF technologies have varying cost profiles and could require different floor prices in order to provide the level of revenue certainty required to secure investment.

Question 6

Do you agree with our explanation of the Mandate Floor Price mechanism? Is there anything else we need to consider?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	40	6	0	28

Over half of the respondents agreed with our explanation and the rest did not specify a view.

Government response

Similar to MAR, it was positive that respondents agreed with our explanation of this mechanism option, even with many concerns raised. It was useful to test this regulatory option with a possible accelerated delivery timeline.

Government Decision: Responses agreed with the definition of the MFP. As explored further in question 8, the MFP has not been progressed for implementation.

4. Options assessment and conclusions

Developing the Mandate Auto Ratchet

Consultation proposal

The MAR could provide investors with confidence that the government will intervene to increase the amount of SAF needed to meet the UK SAF Mandate obligations, thus maintaining the SAF price level in the UK market. It would also be comparatively simple and easy to establish without the need for primary legislation, private law contracts or a counterparty.

However, it would offer less certainty to investors and impacts all SAF suppliers globally, rather than just UK producers. Increasing demand for SAF by raising the Mandate could also lead to bigger ticket price increases, as SAF is likely to be more expensive than fossil jet fuel. It could require repeated consultations and legislative change to implement increases and has potential consequences for the wider transport fuel sector including the Renewable Transport Fuels Obligation (RTFO).

Question 7

Do you agree or disagree that the Mandate Auto Ratchet option should not be taken forward? Please provide supporting evidence where possible.

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	47	1	3	23

The majority of responses agreed that MAR should not be a taken forward, with only three in disagreement.

Concerns raised included:

- Low levels of certainty – MAR would not provide the same level of confidence to investors as GSP under a private law contract. It risks very high costs for airlines and consumers. It would not manage other risks, beyond the SAF price.
- Complex to implement – Respondents found it unclear on what specific conditions of oversupply would trigger an auto rachet, whether there would be a limited number of ratchets within a specific time, the potential time lags when the ratchet is required and that it could have a detrimental short-term impact on providing revenue certainty particularly for large scale investment plants.

- Pricing and demand – the ability to manage price risk is low. The one key hurdle for addressing demand is the price difference in SAF from jet-A1 kerosene fuel.
- Ability to target UK production – the MAR would treat UK and imported SAF the same, so support would not be targeted at UK SAF production.

Those in support of progressing MAR all viewed the mechanism as a good bolt-on option and also acknowledged it was a more reactive review mechanism than the in-built SAF Mandate review periods.

Government response

We have considered using MAR as a bolt-on option for the Revenue Certainty Mechanism and SAF Mandate. Our current position is that the SAF Mandate already has review periods built into the scheme's regulations. Although MAR would be more reactive to triggers allowing movement towards certificates price levels to be more predictable, it is important for industry to have a degree of stability and constant changes to obligations could undermine the UK SAF Mandate.

The design of MAR cannot inherently ensure UK SAF production is stable and growing in the market as it cannot protect against more cost competitive imported SAF that is eligible for the UK SAF Mandate sharing in the revenue certainty benefits of the mechanism.

The government's position is that the MAR should not be taken forward. It is not clear how the mechanism would attain the same degree of revenue certainty as other options involving private law contracts or how it could realise the exclusive support to ensure domestic SAF production grows and is competitive with imported SAF.

Government Decision: MAR will not be taken forward for implementation.

Developing the Mandate Floor Price

Consultation proposal

The Mandate Floor Price would provide investors with confidence that the value of SAF Mandate certificates cannot drop below a certain value. Like the MAR, it would also be comparatively simple and easy to establish without the need for primary legislation, private law contracts or a counterparty.

However, like the MAR, it would offer less certainty to investors and impacts all SAF suppliers globally, rather than just UK producers. It could artificially keep the price of SAF close to the buy-out potentially resulting in bigger ticket price increases. It could also require repeated consultations and legislative change to implement increases. Setting an appropriate minimum certificate price would also likely be complex.

Question 8

Do you agree or disagree that the Mandate Floor Price option should not be taken forward, even if can be delivered sooner than the private law contract mechanisms? Please provide supporting evidence where possible.

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	48	22	1	3

There were concerns on:

- SAF Price – It artificially keeps SAF prices high and close to buy-out. It does not incentivise cost reduction which is critical to the success of this industry. It may create a negative impact on consumers and air fares. The mechanism could need to contain provisions to review the floor price over time since the different pathways to SAF may experience feedstock price fluctuations and become uncompetitive even with a floor price.
- Low levels of certainty – MAF gives significantly less certainty and lower levels of risk share than either the GSP or BOLR proposals. If the cost of producing SAF increases, then revenue from SAF certificates might not provide enough cushion to SAF producers to enable them to compete with conventional jet fuel producers.

Respondents also highlighted how this scheme could interfere with certificate trades that are routine under the RTFO. Companies typically trade renewable transport fuel certificates (RTFCs), either directly or through a number of broker services. It is also common industry practice to exchange RTFCs from one company to another at a nominal low, or zero, value in order to offset an obligated suppliers' obligation down the fuel supply chain (often called “netting”). Given the similarities between the RTFO and the SAF Mandate, it would be reasonably expected that this practice is likely to be extended into the jet fuel supply sector and regulation of it could impact the effective operation of the SAF market.

Government response

We included this option as one of two mechanism options that did not rely on the administrative considerations of a private law contract in order to meet the main priority of stakeholders i.e. delivery speed or higher degree of revenue certainty.

We are content that both the presented outcome from the principles scoring, and views compiled from the responses provided solid evidence to not progress with the MFP. In comparison to private law contracts, the level of certainty that could be realistically achieved by the MFP is not at a level which deliver the strategic aim of a revenue certainty mechanism, attracting investment into UK SAF projects.

The potential ceiling to the SAF Mandate certificates will be set through the buy-out price and introducing an MFP would then add a minimum trading value to these certificates. The government recognises the concern over market distortion by the interventions at both points of the certificate value. Airlines were particularly concerned at the potential impact of permanently inflating the cost of SAF.

This option would also not have the ability to exclude certain groups of producers, such as foreign based production or HEFA derived SAF. This would undermine a key purpose of the Revenue Certainty Mechanism.

Government Decision: MFP will not be taken forward for implementation.

Achieving certainty through a private law contract

Consultation proposal

The shortlisted revenue certainty mechanism options would either have a legal basis from extensions to regulations or via private law contracts. After considering the qualitative and quantitative assessments, the consultation concluded that the type and level of certainty required by the investment community is best achieved through a private law contract between a SAF producer and the government/a government backed counterparty. We wanted to check these findings through the consultation and see whether the consensus was to progress with a contractual mechanism or if there were other suggestions, such as a hybrid approach.

The strengths of a private law contract involve having an agreed contract that cannot be easily subjected to a change of political direction resulting in amendments or revocation of the legislation of a scheme. Analysis also noted the benefit created by the strong creditworthiness of a government-backed counterparty.

Question 9

Do you agree or disagree that the certainty required by the investment community is best achieved through a private law contract between a producer and government (or government backed counterparty)? Please provide supporting evidence where possible.

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	No comment
74	42	8	2	22

Of those that expressed a definitive agreement or disagreement with the question, there was a clear majority of responses in favour of implementing a private law contract option to achieve the certainty sought by the investment community. The predominant reason was the protection against political or policy uncertainty. Responses suggested that a contractual mechanism would be more reliable than a scheme solely codified in provisions of statutory legislation that can be amended, revoked or repealed.

The positives of having a government backed counterparty that was an arm's length body were also raised. This is further explored in questions 15 and 16.

Government response

The government shares the view that the certainty required by the investment community is best achieved through a private law contract between a producer and a government-backed counterparty.

We agree that additional security is provided by a private law contract as it protects against legislative changes. As explored in question 15 and 16, a government-backed counterparty ensures stability and confidence because of its high creditworthiness.

The overwhelming majority view from respondents, that a private law contract mechanism best provides revenue certainty, provides strong backing to our decision to progress the consultation’s preferred mechanism option of GSP and matches the evidence we have collated from market engagement.

Government Decision: the private law contract mechanism, GSP, will be taken forward for implementation.

Preferred mechanism

Consultation proposal

The consultation presented the GSP mechanism option as its preferred option. Along with the advantages listed above, the GSP was the most investible option, comparatively straightforward to introduce, and provides better value to the consumer. The consultation also highlighted that a GSP could learn from similarly designed schemes in other energy and fuel industries, has a clear claim process and directly targets UK SAF production.

Question 10

Do you agree or disagree that the GSP should be the preferred option to consider developing of the two private law contract options? Please provide supporting evidence where possible.

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	40	12	5	17

The majority of respondents who answered this question supported GSP being considered for development out of the two private law contract options. A significant factor put forward was the precedent established in other low carbon energy sector from contracts for difference schemes, which generates high levels of confidence for investors. Some noted the value for money element of the upside return to the counterparty in a short market and therefore a fairer share of risk. Respondents emphasised the urgency to deliver a mechanism and believed showing support for the preferred option (GSP) would benefit the government's resources and delivery timings, due to continuity and simpler execution proven by its use in energy transition sectors.

Some of the arguments disagreeing with GSP as the preferrable contractual mechanism centred around the BOLR mechanism being more likely to be set at a lower level than the GSP therefore being less frequently activated and thus being simpler and better value to administer.

Government response

The government's intention is to proceed with a GSP-based revenue certainty mechanism. We believe that a GSP offers the highest level of confidence for investors and is therefore most likely to achieve the goals of the Revenue Certainty Mechanism.

Furthermore, the precedent established in the low carbon energy sector for contracts for difference schemes shows that this scheme generates high levels of confidence. We are also committed to working closely across government to identify best practice and lessons learnt from existing schemes. Being able to draw some design elements from existing schemes will also allow us to proceed as quickly as possible with scheme design and implementation.

A GSP would also provide a clear claim process because it stays consistent. This means that, providing market trades can be observed, the reconciliation of payments will be a relatively straightforward process, and they can be made at regular intervals. A GSP will also provide a guarantee on the entire price of SAF, as it relates to fuel price, as opposed to a BOLR style mechanism which guarantees a price on the value of SAF certificates. This therefore provides more guaranteed revenue, and greater certainty to investors.

A private law mechanism, such as the GSP, can also be directly targeted at the UK production of SAF ensuring that the Revenue Certainty Mechanism contributes to its goals of supporting a UK SAF industry. By contrast, mandate-based mechanisms would not be able to differentiate between UK production and imported SAF.

As outlined in our responses to questions 7-9 we do not believe that the other options consulted on would as effectively achieve the aims of the Revenue Certainty Mechanism. These options do not provide as much certainty to investors and would therefore not attract as much investment in UK SAF plants.

Government decision: we will proceed with the GSP option.

5. Detailed contract considerations

Other key contract elements that need to be considered

Consultation proposal

The consultation understood the importance of allowing respondents the opportunity to flag considerations and interactions not directly captured by the consultation publication.

Question 11

Are there any other key elements of any revenue certainty mechanism contract that need to be considered?

Summary of responses

A strategic question was raised about how many projects will be supported, with several responses suggesting that a diverse spread of projects should be supported.

Issues raised include whether the scheme would permit or support SAF produced at UK facilities that has been or is intended to be exported. This issue has also been raised during pre-consultation engagement with industry stakeholders. It was suggested that contracts could stipulate caps on volumes support by a mechanism for each project. This reduces the contingent liability on the underwriter but also attracts equity investors due to the ability for producers to capture full profits.

On the appropriate contract duration, the majority of respondents stressed the importance of a term length that will provide sufficient confidence to investors and secure debt finance. The consultation suggested a term length between 10 - 15 years, which is similar to contracts for difference in other sectors – with 15 years being the most cited. However, there were points raised about adapting the term length by technology, including for nuclear derived PtL. Another point raised was dividing the contract term into stages and for the Revenue Certainty Mechanism to support different volumes of SAF in different stages of the contract.

Wider interaction of the scheme may need to consider how many prospective SAF producers plan to utilise hydrogen in their technological process. Responses, from a variety of organisation types, presented the case that hydrogen supported under the Hydrogen Production Business Model should be permitted under SAF production covered by a revenue certainty mechanism. They suggested this double stacking of incentives is compliant with subsidy control as they are separate supply chains.

Beyond the contract, some issues were identified:

- Some responses suggested that additionality requirements for PtL SAF producers, which help ensure the sustainability of PtL SAF, could increase the cost and complexity of PtL in the UK and lead to investment being directed elsewhere. The government was urged to design the Revenue Certainty Mechanism to consider any additional costs related to compliance with additionality.
- There was wider challenge to the government's feedstock policies being too restrictive.
- Respondents offered a list of domestic and international frameworks for subsidy control and stressed the importance of ensuring there is compliance.

Government response

We recognise that Revenue Certainty Mechanism contracts will be complex, and the design process will need to take into account the different situations of SAF plants based on their production pathways, scale and financial situation. It is vital that the Revenue Certainty Mechanism strikes a balance between investor confidence, value for money and deliverability, and we will continue to work closely and transparently with stakeholders to achieve this.

We also recognise that there is value in developing a range of SAF feedstocks and technologies and we will continue to make space for these forms of SAF through the SAF Mandate PtL sub-obligation, HEFA cap and through other policy measures. We will provide further information on the specific considerations and details of Revenue Certainty Mechanism contracts in due course, recognising the need to provide certainty to investors and industry as soon as is possible.

On additionality and feedstocks, the government supports SAF as a sustainable way to help decarbonise aviation and we are clear that the Mandate and Revenue Certainty Mechanism must deliver fuels with the highest sustainability credentials. We will continue to monitor the sustainability of SAF pathways and to engage with stakeholders on this issue to ensure that high sustainability standards are maintained, and GHG reductions are delivered.

We are also committed to ensuring that government policies that affect SAF production are joined up and coordinated and we will continue to work closely across government and with stakeholders to achieve this.

Other considerations for SAF developers to take into account

Consultation proposal

Project developers have a myriad of risks to factor into business plans. The consultation wanted to offer the opportunity to understand how this relates to seeking support under a revenue certainty mechanism, particularly a private law contract option.

Question 12

Are there any other considerations that project developers will need to take into account?

Summary of responses

Responses touched on a variety of considerations including the contract length, the ability to renegotiate or amend contracts, the need for differential treatment for different SAF technologies and the importance of feedstock and other input supply. They also highlighted the importance of GSP price setting and the importance of ensuring suppliers are incentivised to achieve the best possible sales price.

Many responses to this question touch on similar themes that are explored or directly addresses in other questions. Where that is the case, they are addressed in the government's response to that specific question.

Government response

The government recognises that project developers have a wide range of considerations and risks which factor into business planning and investment decisions. A range of relevant considerations were identified, and we will continue to work closely with industry to ensure that the Revenue Certainty Mechanism, both in its scheme and contract design, accounts for these risks where appropriate.

Other considerations that should be taken into account by the contract funder

Consultation proposal

A range of other considerations will inform decision-making around Revenue Certainty Mechanism contracts including, but not limited to, the length and flexibility of contracts.

Question 13

Are there any other considerations that should be taken into account by the contract funder?

Summary of responses

The responses raised a number of other considerations that should be accounted for by the contract funder to ensure that the Revenue Certainty Mechanism provides sufficient certainty to encourage investment in a UK SAF industry. In particular, they focused on contract length, the costs of SAF production and potential funding for a revenue certainty mechanism.

Government response

Many stakeholders raised the importance of ensuring that Revenue Certainty Mechanism contracts have sufficient term length and flexibility to encourage investment. This is addressed in the response to question 11.

Stakeholders also raised the importance of the Revenue Certainty Mechanism considering the full costs of producing SAF including electricity prices and feedstock costs. We will continue to work closely with industry to develop our understanding of the costs of SAF production and expect any Revenue Certainty Mechanism contract to consider the full cost of production.

Some stakeholders also raised questions around the funding of the Revenue Certainty Mechanism. We will consult shortly on how the Revenue Certainty Mechanism is funded.

Allocation method

Consultation proposal

The consultation also investigated the issue of contract allocation under a revenue certainty mechanism. Market-led proposals (potentially involving qualification), tendering processes, auctions and standardised pricing were raised.

Question 14

Which contract allocation method is most appropriate? Why?

Summary of responses

The majority of total respondents did not offer a preference or considerations for this question on contract allocation method. However, many suggested different approaches for the early rounds compared to future allocation once first-of-a-kind projects supported by the scheme are established. For example, some suggested that bilateral negotiations or a tendering process should be preferred to a competitive auction at the initial stages.

It was also suggested that in the latter rounds, contract allocation could transition into an auction format. This is because more projects could be willing to bid for revenue certainty support and a more competitive process may therefore be appropriate.

Should there be a tender process with selection criteria or a competitive auction, many responses suggested grouping technologies into "pots" as the costs (and finished SAF prices) varying among the different pathways, in addition to GHG emissions.
It was noted that an auction or an excessively tolerant selection criteria for tendering process could lead to underdeveloped projects bidding.

Specific options for conducting an auction raised by respondents included the 'pay as clear' auction and a descending clock reverse auction. Another option raised was inserting an obligation for projects to post a form of performance bond.

There was significantly less support and more aversion towards using standardised pricing. Reasons for this view focused on the different challenges of the different pathways to produce SAF, in particular PtL and other forms of advanced SAF.

Government response

We recognise that there are significant advantages and disadvantages to the various contract allocation methods that could be used to deliver a revenue certainty mechanism. There will also be distinct challenges facing contract allocation for the Revenue Certainty Mechanism because of the relative nascency of the market, the challenge of price discovery and the range of SAF production pathways.

We also recognise the importance of providing certainty to industry and investors on the allocation process to allow investment decisions to be made. We will continue to work closely with stakeholders to develop a robust and effective allocation process that can be delivered as soon as is practicable.

Administration of revenue certainty mechanism

Consultation proposal

The consultation provided an outline of the characteristics and responsibilities for a counterparty in a private law contract mechanism. They would need to have the administrative experience and capability manage the contracts and would need to hold a high-grade credit rating to bring the level of financial certainty needed. In the existing contracts for difference scheme, the Low Carbon Contracts Company (LCCC), which is a private company wholly owned by the Secretary of State for Net Zero and Energy Security as sole shareholder, is the counterparty to the contracts awarded to successful developers of renewable and nuclear projects.

Question 15

Do you agree that this is the most appropriate way to administer a revenue certainty mechanism?

Summary of responses

Total	Agree	Neither agree nor disagree	Disagree	Don't know
74	30	1	1	42

The majority of responses chose not to focus on this question about a government-backed counterparty to administer. This is likely due to many elaborating on their views on counterparties in their response for question 16 (preference for which entity should be the counterparty).

Government response

See Question 16.

Counterparty

Consultation proposal

The Low Carbon Contracts Company (LCCC) were highlighted as an example of a body acting as a counterparty for similar schemes in other sectors. The Civil Aviation Authority (CAA), as well as other bodies with regulatory functions, were named as possible options to perform the counterparty duties.

Question 16

Do you have any views on the most appropriate counterparty?

Summary of responses

The clear preference from responses was the selection of the LCCC if a revenue certainty mechanism involving a private law contract requiring a counterparty was progressed. Of those 44 respondents who answered the question, 33 suggested to appoint LCCC as counterparty with 4 respondents outlining some criteria but not specific organisations.

The credibility of the LCCC with the investor and finance community, its financial creditworthiness and its experience in managing contracts for difference type arrangements were all highlighted. It was also suggested that using the LCCC as a counterparty would allow for a quicker and more pragmatic development of scheme specifics than creating a new agency. Some also noted that LCCC may need additional resources to account for increased workload and to support technical and sector knowledge development.

A smaller number of respondents did not specify the LCCC, but suggested a UK government agency should be the counterparty to provide sufficient confidence for investors. The Civil Aviation Authority was suggested by some, noting its power to raise funds from industry through regulatory charges. However, others suggested that the CAA was not set up or designed to act as a counterparty and that an organisation which had greater independence from industry would be more appropriate.

Finally, it was suggested in one response that airports and airlines could act as a counterparty, noting that they are the ultimate consumers of SAF and play a similar role when signing offtake agreement with aviation fuel suppliers.

Government response

The government acknowledges that for the Revenue Certainty Mechanism to be effective the counterparty will need to be backed by government.

The Low Carbon Contracts Company, which is a private company wholly owned by the Secretary of State for Net Zero and Energy Security as sole shareholder, is the counterparty to the contracts awarded to successful developers of renewable and nuclear projects under the existing electricity Contracts for Difference and low carbon support schemes.

We are committed to working closely with LCCC and other organisations across government to ensure that lessons learnt are embedded into the design of the Revenue Certainty Mechanism and to ensure that final form contracts operate effectively.

6. Next steps

Following the King's Speech on 17 July 2024, the government has confirmed that it will introduce the SAF Revenue Support Bill in the first session of Parliament. This Bill will provide primary powers required to deliver a GSP-style mechanism for SAF production in the UK.

We expect the legislation for a revenue certainty mechanism to be in place by the end of 2026 and, working alongside the parliamentary process, will continue to work with industry to deliver a revenue certainty mechanism at the earliest possible date.

We are also committed to continuing to work closely with industry and other stakeholders as we develop revenue certainty contracts and an allocation method as well as on the details of scheme administration.

The Revenue Certainty Mechanism will be industry funded. We will be consulting on this issue shortly.

Together, with the targets set by the SAF Mandate, the Revenue Certainty Mechanism will give the investment community confidence to invest in these novel and innovative technologies. This new sector will create jobs and growth opportunities in the UK, help secure a supply of SAF for UK airlines, enhance energy security and be a key contributor to delivering greener aviation.

Working with the devolved administrations

We received formal responses from the devolved administrations of the UK after engagement with them prior to publication of the consultation. We will continue to work closely with the devolved administrations as we support the use and production of SAF across the UK.