

Government Response to Developing a UK Sustainable Aviation Fuel Industry Report

Department for Transport Great Minster House 33 Horseferry Road London SW1P 4DR



© Crown copyright 2023

This publication is licensed under the terms of the Open government Licence v3.0 except where otherwise stated. To view this licence, visit https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or contact, The National Archives at www.nationalarchives.gov.uk/contact-us.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

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

Any enquiries regarding this publication should be sent to us at www.gov.uk/government/organisations/department-for-transport

1. Introduction

- 1.1 Sustainable Aviation Fuels (SAF) are one of the key technologies available to government and industry to decarbonise aviation. SAF are one of six key measures in the government's Jet Zero Strategy¹, published in July 2022, setting out how the government will deliver on our commitment to reach net zero aviation by 2050.
- 1.2 SAF is already in use today, with 26 million litres of SAF being supplied in the UK last year². Recent independent analysis, conducted for Sustainable Aviation, forecasts the potential for around 60,000 jobs to be created from a UK SAF industry by 2050 and £10bn of Gross Value Added per annum including upstream benefits³.
- 1.3 Global demand for SAF is increasing, with IATA estimating the supply of SAF will increase from around 300 million litres in 2022 to around 5 billion litres in 2025⁴. This is being driven by an increasing number of global jurisdictions announcing SAF mandates and packages to support growth of the sector, in addition to the voluntary demand that is already being driven by net zero targets and consumer preferences.
- 1.4 The government has been clear that it wants to see the UK continue to capture its share of that global market and play a leading role in the development, production and use of SAF, allowing us to achieve net zero flying, and creating thousands of green jobs.
- 1.5 The government is already achieving this by:
- Creating and growing secure UK SAF demand: through introducing a SAF mandate from 2025, requiring at least 10% (~1.5 bn litres) of UK aviation fuel to be made from sustainable sources by 2030. By mandating the use of SAF, the government is seeking to generate demand, provide an incentive for SAF producers to do business in the UK, and signal to investors the vital role the government believes the technology will play in the UK. On 30 March 2023, the government published the second consultation on the SAF mandate, setting out the key building blocks for a structure that delivers these objectives.
- **Kick starting a domestic SAF industry**. The UK government has already invested in the early-stage development of eight UK SAF plants through the Green Fuels, Green Skies competition⁵. And the government recently announced that five projects will receive a share of the funding from the Advanced Fuels Fund, which aims to take

¹ Jet Zero-strategy: https://www.gov.uk/government/publications/jet-zero-strategy-delivering-net-zero-aviation-by-2050

² Based on provisional statistics for 2022: https://www.gov.uk/government/statistics/renewable-fuel-statistics-2022-third-provisional-report

³ Forecasts are based on independent analysis conducted by ICF consulting firm. The jobs and GVA figures are based on direct, construction and upstream jobs benefits. Analysis assumes UK SAF production costs are equivalent to wider global SAF production costs.

⁴ Net zero 2050: sustainable aviation fuels (iata.org): https://www.iata.org/en/programs/environment/sustainable-aviation-fuels

⁵ <u>https://www.gov.uk/government/publications/green-fuels-green-skies-gfgs-competition/green-fuels-green-skies-gfgs-competition-winners</u>

- as many SAF projects as possible through to commercial-scale production. To accelerate novel SAF production pathways to market, the government is also setting up a UK Clearing House to support the testing and certification of fuels. On 30 March 2023 we launched the second application window for the Advanced Fuels Fund.
- Working in partnership with industry and investors to build long term supply.
 We began actively looking at how to create the long-term conditions for investable projects in the UK last year. The government focussed on building evidence from industry to understand the opportunities, challenges and potential further measures and commitments that might be needed to stimulate investment in a UK SAF industry, beyond demonstrating technology that works at scale and ensuring demand via the mandate. This included actions and commitments for both industry and government.
- 1.6 Following extensive engagement with stakeholders from across the sector, in October 2022 we commissioned Philip New to lead an independent evaluation of the conditions necessary to create a successful UK SAF industry. The primary aims of the evaluation were to:
- Review and supplement our evidence regarding the barriers to investment in SAF in the UK.
- Identify the UK's strengths and challenges.
- Examine the key conditions for a successful UK SAF industry and whether and how the UK could meet those conditions.
- Consider whether the measures other countries have put in place will be effective and whether UK industry could compete without further government support.
- Provide recommendations for addressing some of the barriers to investment.
- 1.7 The evaluation builds on the Department for Transport's prior engagement with SAF producers, fuel suppliers, airlines and investors. It is underpinned by evidence shared with the author from over sixty stakeholders as well as the author's own expertise in low carbon fuels and knowledge across the energy sector.
- 1.8 The evaluation culminated in a "Developing a UK Sustainable Aviation Fuel Industry" report, which is published alongside this government response. In this government response, we set out our views on the key conclusions from the two main parts of the report: Part One, 'Framing', and Part Two, 'Interventions', along with our proposed next steps.
- 1.9 The UK low carbon fuels sector is making substantial progress in developing SAF facilities utilising a variety of pathways. We look forward to building on our existing policy support and the actions that industry have taken to support a SAF industry including commitments to net zero, SAF flights, and SAF offtake agreements. These provide a vital foundation for industry and government to continue to work together to unlock the investment needed to scale up the UK SAF industry and ensure existing and future SAF policy remains effective at driving investment in the UK.

2. Government response to Part One: Framing

- 2.1 Due to the complexity and diversity of perspectives from stakeholders, the report developed a set of framing observations, establishing a common platform from which underlying assumptions could be scrutinised and areas of alignment and disagreement explored. The scope of the report is included in the annex of the report. Part One also considered some important broader questions which the author felt merited discussion. These questions include:
- Is producing SAF a rational use of renewable energy resources?
- Will the emergence of alternative aircraft technologies and usage patterns render SAF redundant, risking stranding assets?
- Does the UK need to have a material domestic SAF manufacturing base?
- If so, does government need to continue to intervene to support its development?
- 2.2 Part One of the report refers to four main risks that act as barriers to investment into UK SAF plants, which are defined below:
- Technology risk: Advanced SAF technologies, production pathways that do not use
 hydroprocessed esters and fatty acids (HEFA), are at early technology readiness
 levels and require innovation and demonstration support before they are ready for
 commercial deployment. There is a risk that these technologies will not operate as
 expected once they are deployed at commercial scale.
- Feedstock security risk: There is significant competition for resources that can be
 used as feedstocks for SAF production within the UK. Investors have identified a risk
 that, in the absence of long-term feedstock contracts, SAF producers will not be able
 to attract sufficient feedstocks to maintain forecasted levels of production and
 therefore attract the required returns on investment.
- **Construction risks**: This relates to the building of SAF plants on time and in line with the performance specification. For a SAF plant the source of such risk include ground condition risks, interface between different parts of the plant and underestimation of time to build and commission, particularly when scaling up production.
- Revenue certainty⁶ risk: Due to uncertainties regarding the future cost of SAF, and an unclear market price, there is a lack of certainty over the revenue that SAF production will attract.

⁶ Certainty provided through a stable or guaranteed long-term price (e.g., through a contract), providing certainty in this case to renewable and low carbon fuel investors and producers for the price of their produced fuel, reducing risk and allowing costs to be forecasted against revenue.

Summary of Part One of the report's main conclusions

- All stakeholders placed significant importance on the role that SAF will play in decarbonising aviation and highlighted that the production and consumption of SAF must be seen in a global market context.
- The UK has several competitive strengths, namely in aviation technology and fuels infrastructure, as well as potential strengths in feedstock access and green finance capacity. But the UK also has some important gaps and challenges, such as engineering procurement and construction capability/capacity and dependence on debt finance.
- The clearest potential role for the UK will likely be in the development of a second generation (2g), non-HEFA, SAF sector, utilising the availability of feedstocks and proximity to markets. The SAF mandate will help to create a two tier SAF market with HEFA and a distinct second generation SAF market.
- The SAF mandate from 2025, should:
 - not rely on being totally met by imports;
 - do much of the heavy lifting (it is intended to close the cost gap between SAF and kerosene);
 - provide ongoing financial support for the supply of SAF through tradable certificates; and
 - therefore could provide a strong incentive to attract second generation technology and investment to the UK.
- However, the SAF mandate alone is not seen as sufficient to unlock material investment in the UK – largely due to the dependence on debt finance and market and technology immaturity.
- There is a consensus that the mandate needs to be supported by other interventions to attract investment in UK supply. The need for further intervention (beyond the mandate and Advanced Fuels Fund) is also driven by the significant availability of support in other countries and UK sectors that are competing for investment.
- The Advanced Fuels Fund is important in helping scale up SAF production in the UK. It will help drive UK production and overcome some of the technology and construction risks. The mandate and the grant funding together provide a strong long-term signal to investors.
- There are clear benefits to supporting SAF plants, planned to be located in parts
 of the UK that have experienced significant de-industrialisation and economic
 decline. These are areas often adjacent to hydrogen supply and carbon capture
 utilisation and storage.
- There remain multiple barriers (technology, construction, feedstock, and revenue certainty) that need to be addressed before substantive investment will be attracted towards UK SAF plant development. The importance of the government continuing to work together with industry is paramount to tackling these barriers and to exploring how any potential interventions – by industry or government – could be targeted to address them.

Government response

- 2.3 The government welcomes the report's acknowledgement of the importance of the existing UK SAF policy framework, and the report's recognition that both the SAF mandate and ongoing grant funding for SAF plants are key to driving demand and kickstarting supply, addressing some of the key barriers to investment highlighted.
- 2.4 The government's grant funding programmes are critical to tackling technology and construction risks by supporting projects through early-stage engineering and design phases to get spades in the ground. In July 2022, the Advanced Fuels Fund (AFF) was launched, with £165m being made available. Building on the success of the Green Fuels Green Skies (GFGS) competition, it will support projects looking to develop first-of-a-kind commercial scale SAF plants in the UK. The first five winners were announced in December 2022 and on 30 March 2023, the government launched the second application window. This grant funding is already helping to deliver our commitment to see at least five commercial scale SAF plants under construction in the UK by 2025. The government is also supporting SAF plant production through a £400m partnership with Breakthrough Energy Catalyst where SAF projects can apply for further capital funding. To accelerate novel SAF production pathways to market, the government is setting up a UK Clearing House to support testing and certification. We have recently announced the University of Sheffield as the delivery partner for this project.
- 2.5 However, as noted in the report, these funds are not designed to provide revenue certainty or sector-wide assurances over feedstock supplies.
- 2.6 The UK SAF mandate is a promising market shaping mechanism that sends an important long-term signal to investors. The report highlights that the mandate is intended to close the gap between SAF and the price of fossil kerosene⁷, as it will provide price support⁸. SAF producers will receive price support for SAF via the mandate scheme either directly (through earning certificates themselves), or indirectly given that obligated parties are willing to pay a premium over the cost of fossil kerosene for the SAF to fulfil their obligations. The certificates will have a cash value determined by the market. The mandate will incentivise higher greenhouse gas (GHG) savings by providing greater support for SAF with higher GHG savings (in the form of additional certificates). In doing this, the mandate provides support to the SAF industry by guaranteeing demand and providing price support, rather than specifically revenue certainty (as defined on page 5) for UK SAF production facilities. Whilst the proposed SAF mandate will provide significant incentives to SAF producers and targets for the supply of SAF set out in legislation, the price obligated suppliers are willing to pay for SAF will be driven by the market and this price is difficult to predict given this is a new scheme. This does not provide the level of longer-term revenue certainty being sought by many investors.
- 2.7 Regarding the reference to the UK's dependency on debt finance, we note the recently published Green Finance Strategy⁹ recognises the UK as a leading green finance centre internationally.

- Turning to feedstock supply, the government's priority is to promote wastes that have limited economic value, for use as transport fuels and alternative use in accordance with the waste hierarchy. These feedstocks offer high GHG savings and low risk of wider environmental impacts such as deforestation as well as avoiding competition for land from food crops. Through the Renewable Transport Fuels Obligation (RTFO), there are strict carbon and sustainability criteria which ensure that low carbon fuels are produced from sustainable feedstocks. Waste feedstocks accounted for 76% of all renewable fuel supplied under the RTFO in 2021. We have confirmed that all SAF supplied under the SAF mandate must be produced from waste or a low carbon energy source (i.e. a power to liquid fuel).
- 2.9 As the report also highlights, however, a key determinant in the effective supply of low carbon fuels, such as SAF, is the availability of sufficient quantities of suitable feedstocks to produce them. Availability is limited by competition for feedstocks across the wider energy and transport sector. The government accepts the importance of working through these challenges to ensure a stable UK market for sustainable feedstocks. The Biomass Strategy and Low Carbon Fuels Strategy will provide further clarification on these matters later this year.
- 2.10 In summary, the government agrees there remains a real opportunity for the UK to play a leading role in the development of a SAF industry. This is particularly in terms of non-HEFA SAF, where there is potential to diversify the technology and feedstock pathways used in the UK and reduce our reliance on limited feedstocks such as used cooking oil. Fulfilling our commitment to help build a UK SAF industry would bring additional benefits including creating green jobs, growing the economy, as well as energy security. It will be important to ensure that SAF production makes the most effective use of energy resources as they are finite, as further evidence is gathered, by industry and government, on the best path to net zero.
- 2.11 The government response to Part Two of the report (page 13 onwards in the report) sets out how we will further consider potential ways to address constraints over certainty of feedstock supply.
- 2.12 It is important to note that the report's findings align with those of Chris Skidmore's independent review of net zero¹⁰. Many of the responses to the Skidmore review highlighted the potential of a SAF market to the UK economy, provided the UK can establish production sites early. The review also highlighted the importance of a potential SAF industry in the UK to Pillar 3 (Net Zero and the Economy), including the opportunities from building domestic supply chains in the development of such an industry.

⁷ Depending on the pathway, it is estimated the cost of SAF is between two and four times higher than conventional fossil jet fuel, IATA 2021. https://www.iata.org/en/pressroom/2022-releases/2022-06-21-02/.

⁸ Price support is the assistance with the price of a product, in this case supporting fuel producers by making SAF a price competitive decarbonisation option to aviation by closing the cost gap between the price of SAF and fossil kerosene.

⁹ Mobilising Green Investment - 2023 Green Finance Strategy (publishing.service.gov.uk)

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689 /mission-zero-independent-review.pdf

3. Government response to Part Two: Interventions

Summary of the report's headline recommendations

The report made a number of recommendations for further actions that government and industry could take to support a UK SAF industry by addressing the challenges and overcoming the barriers set out in Part One. These can be summarised as:

- Leveraging the potential of the SAF mandate this links to the 'runway' concept regarding mandate emissions-saving criteria, (such as the minimum carbon intensity reduction of the SAF, compared to kerosene, that can be eligible under the mandate being initially less stringent but tightening over time). This is so early build assets can produce eligible SAF and receive support under the mandate, mobilising early investment.
- Securing scalable and bankable feedstock supply by expanding the allowable feedstock pool as far as possible (including recycled carbon fuels), building confidence in feedstock supplies and exploring initiatives that have been implemented in other areas of decarbonisation.
- Ensuring a level playing field for UK SAF producers with other low carbon technologies in the UK and with international SAF production (including preventing subsidised imported product from enjoying a double incentive benefit).
- Implementing specific short-term interventions to de-risk early projects, such as an 'icebreaker' concept to provide confidence in the technology by selecting the most promising SAF projects to move to Final Investment Decision quickly and fast track their construction by agreeing a set of guarantees against key variables.
- Developing private law contract revenue certainty mechanisms, which could be underwritten and supported by industry - the report invites industry to play a leading role in the design and development of such a mechanism, acting as underwriters, developing and deploying a levy-funded pot and potentially establishing a counterparty/scheme operator function.

Definitions

'Runway' - this concept involves loosening obligations on fuel suppliers in the short term, in order to mitigate the risk of SAF plant development being slowed down due to stringent sustainability criteria. It is expected that the carbon intensity of SAF will decrease over time through the decarbonisation of the grid and supply chains, the optimisation of production processes and the adoption of carbon capture utilisation and storage in reducing emissions of some of the SAF pathways.

'Icebreaker' - this concept involves directly supporting project development of one or two plants in the UK. In addition to grant funding, loan guarantees and other innovative measures could help to ensure that at least one advanced SAF plant could be developed to commercial size in the UK. Accelerating commercialisation of a plant in this way could provide valuable reassurance and learnings for the technology to the rest of industry, which could go a long way to providing private investors with the technology assurance they are looking for.

Government response

- 3.1 The government welcomes the report's assessment and recommendations for tackling the main challenges and barriers to the establishment of a sustainable, long-term SAF industry in the UK.
- 3.2 Below, we set out our views on the action government and industry can take going forward to address the key challenges and recommendations.

Leveraging the potential of the SAF mandate

- 3.3 The government remains committed to having the SAF mandate in place from 2025 and on 30 March 2023 we published the second consultation on the scheme design, including targets and the levels of incentive available.
- 3.4 The government is considering how a 'runway' concept could be achieved through the mandate within the second mandate consultation. Specifically, the consultation sets out an option of setting a lower minimum GHG saving threshold in the initial years of the mandate. This will ensure the threshold does not unnecessarily exclude SAF that has potential for significant GHG savings in the future, encouraging a diverse pool of SAF technologies to develop. It is proposed that the minimum threshold is increased as the electricity grid continues to decarbonise, Carbon Capture Utilisation and Storage (CCUS) solutions are adopted to decarbonise SAF, and SAF production processes are optimised.

Securing scalable and bankable feedstock supply

- 3.5 We are working across government to understand sustainable feedstock availability and principles for priority use of feedstocks, with the aim of providing further clarity to industry. Key to this work is the Biomass Strategy (led by the Department for Energy Security and Net Zero), which looks at the best use of biomass feedstocks across sectors. Also key is the Department for Transport's Low Carbon Fuel (LCF) Strategy, which will focus on a wider range of feedstocks and the fuels used in transport. We expect that both strategies will be published this year. Through the LCF Strategy we aim to set out a vision of how transport use and production of low carbon fuel is expected to evolve through the first half of the 21st century (up to 2050) and how to make best use of the opportunities these fuels offer. The strategy will provide clarity on the role of low carbon fuels in transport in the UK and set out clear principles that will determine the basis for current and future policy decisions, including addressing potential feedstock availability constraints. To accelerate this work, the government will work with industry to develop actions to mitigate supply chain risks and stabilise the UK feedstock market, such as considering the feasibility and impact of providing accurate forecasts of sustainable feedstocks.
- 3.6 We have also committed to support recycled carbon fuels (RCFs) under the RTFO and the SAF mandate, broadening the feedstock pool to include the fossil portion of residual municipal solid waste and certain industrial waste gases. We set out our proposed support framework in the July 2022 consultation on supporting RCFs in the RTFO. This included a proposal for a principles-based approach to determining

feedstock eligibility, ensuring that new feedstocks can be included flexibly as markets evolve and new conversion technologies are developed. We expect to set out the full policy position on this in the coming months. Supporting these fuels requires broadening the primary powers underpinning the RTFO and SAF mandate. The government has tabled an amendment to the Energy Bill which amends the Energy Act 2004 to allow both RCFs and nuclear derived fuels to be supported under renewable transport fuel orders. RCFs are an important part of the low carbon fuels landscape and we recognise the importance for SAF producers in the UK. Four of the winning projects from the AFF first application window plan to use either refuse derived fuel or waste industrial gases.

3.7 We will also support power to liquid fuels (PtL) via a target in the SAF mandate to drive its production. PtL fuels do not rely on biomass or other feedstocks that may have limited availability or come with risks of wider environmental damage. However, PtL fuels do require a lot of energy, both for the production of hydrogen, and in some cases, for the capture of carbon. Because of this, PtL is currently one of the most expensive SAF production methods and its impacts on future UK energy requirements require consideration.

Ensuring a level playing field for UK producers

- 3.8 The cost and availability of clean electricity and hydrogen, waste and carbon capture will be important to the scale-up of the UK SAF industry. We agree that electricity costs in the UK are comparatively high, though note that the current prices are uniquely high and are expected to come down. SAF technologies and production pathways rely to some extent on these other low carbon technologies and feedstocks / inputs in the production process and therefore their development is crucial to the development of a UK SAF industry. For instance, as CCUS technology develops in the UK it is expected to be introduced into some SAF production processes. We agree with the report that the UK's leadership and development of hydrogen and CCUS industries, in which the UK has significant technical expertise, are key strengths for the UK SAF investment landscape. We are working across government to ensure the interactions between SAF and these sectors are fully understood and accounted for and the opportunities realised.
- 3.9 At an international level, a priority for the UK is to use our influence within the International Civil Aviation Organization (ICAO) to negotiate for the development and strengthening of international policies and measures that will support the net zero by 2050 goal agreed at its 41st Assembly in 2022. SAF will be a key element in this. We will seek an ambitious global target for the uptake of SAF and internationally agreed measures to help build the global market and ensure collective vision and direction for states and industry. We support the sustainability criteria developed under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and adopted by ICAO in 2021, which set a robust and consistent global standard for SAF sustainability and underpins CORSIA's incentive for SAF uptake.
- 3.10 Furthermore, the UK Emissions Trading Scheme (ETS) supports SAF, in terms of its overall incentive effect for decarbonisation, and the current zero-rating of all eligible SAF. We are working to enhance the effectiveness of the UK ETS: ensuring that aviation is appropriately considered as we respond to a consultation

on amending the cap to align with net zero commitments, reviewing the sector's free allocation, exploring inclusion of non-CO₂ emissions, and making any changes that may be required to account for CORSIA. The UK ETS Authority¹¹ will continue to develop proposals on how the UK ETS should interact with SAF in the light of the responses to the call for evidence in the UK ETS consultation¹². A government response will be published later this year.

3.11 Regarding the report's point on ensuring countervailing tariffs, or similar mechanisms, prevent subsidised imported product from enjoying a double incentive benefit, the UK has set up the Trade Remedies Authority (TRA) to investigate allegations of unfair trading practices, including unfair subsidies and competition. The UK domestic SAF industry can make an application to the TRA to investigate the matter if they believe the industry is being injured¹³ as a result of unfair subsidies from a foreign government.

Implementing specific short-term interventions to de risk early projects, such as the 'icebreaker' concept, to provide confidence in the technology

3.12 The government has already taken steps to get SAF production plants off the ground and under development in the UK. As set out in response to Part One, the government continues to provide funding to help SAF projects reach commercial-scale production, through grant funding competitions such as the AFF and GFGS competitions. These competitions primarily help to address the technology and construction risks that act as barriers to investment. One such project is Fulcrum's Northpoint Plant at Ellesmere Port.

Case study: Fulcrum NorthPoint



The Green Fuels, Green Skies (GFGS) competition supported projects developing UK SAF production plants (£15m funding was made available). Fulcrum BioEnergy Ltd. received funding for development of its NorthPoint plant at Ellesmere Port, which will produce ~100 million litres of SAF per year and is expected to complete in 2027. Grant funding helped the project to progress with initial engineering and prepare it for strategic investment. Fulcrum has since been awarded £16.7m through the Advanced Fuels Fund to continue development and provide support to the project through to financial close. The SAF mandate will be critical for creating demand for SAF and providing ongoing support for SAF production, including from the Fulcrum NorthPoint plant.

3.13 The government is exploring, alongside public finance institutions such as the UK Infrastructure Bank, how it can best deploy other financial tools, including loan

¹¹ Made up of the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland who jointly run the scheme.

¹² https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets

¹³ A determination of injury for purposes of Article VI of GATT 1994 shall be based on positive evidence and involve an objective examination of both (a) the volume of the dumped imports and the effect of the dumped imports on prices in the domestic market for like products, and (b) the consequent impact of these imports on domestic producers of such products.

guarantees, to support SAF investment. The government will also continue to consider other ways by which it can fast track the development of SAF projects, whilst ensuring any necessary procedures are followed.

<u>Developing private law contract revenue confidence mechanisms, which could be underwritten and supported by industry</u>

- 3.14 The government recognises uncertainty of future revenues remains a key barrier to investment in SAF production in the UK. The SAF industry will be in a unique situation because of the forthcoming SAF mandate, which will provide a level of price support, but we recognise that it may not provide long-term revenue certainty for UK SAF production facilities.
- 3.15 The government provides revenue certainty to other low carbon technologies, including through contractual mechanisms such as private law contracts, for example via the low carbon electricity Contract for Different (CfD) scheme. Equivalent support schemes are under development for certain CCUS and hydrogen technologies, with estimates of cost reductions for these technologies. It is important to consider that SAF plants cannot be scaled up in the same way as solar and wind power as they are not modular technologies, so the potential for cost reductions may not be as significant for SAF. In addition, some SAF pathways do not have high technology readiness levels.
- 3.16 The government will continue to consider whether additional support is required alongside delivery of our existing commitments on the Advanced Fuels Fund and SAF mandate. There are a number of options which could be considered to help address the revenue certainty barrier for SAF plants in the UK. Any further support will be tested for deliverability, investability, affordability and simplicity. One option to provide revenue certainty could be the private law contract mechanism recommended in the report, though this type of scheme has never been implemented in parallel to a mandate before in the UK, or globally. The government must therefore consider how any potential support mechanism would interact with the SAF mandate and other incentive mechanisms such as the UK ETS, ensuring that it operates successfully in tandem, and avoids unintended consequences. Furthermore, designing and implementing a mechanism such as a private law contract is likely to be complex and take time to implement, particularly a bespoke CfD scheme.
- 3.17 The government also notes the report's recommendation that industry can play a leading role in the design, development and funding of any revenue certainty mechanism.
- 3.18 We will work together with industry through the Jet Zero Council to consider the best way to support the aviation industry to decarbonise, including **considering options for additional revenue certainty for a UK SAF industry to be provided via an industry funded intervention.** If required, following further engagement, we will launch a formal government consultation this summer.