



Shell UK's response to DfT Jet Zero Consultation September 2021

Shell UK Limited (Shell UK) welcomes the opportunity to respond to the Jet Zero: Our Strategy for Net Zero Aviation consultation.

Shell UK fully supports the UK's overall net zero goal and recognises the requirement to reduce oil and gas consumption to meet it. Decarbonisation within the aviation sector represents a significant challenge, because there are fewer lower carbon options available, the highly competitive and international nature of the industry, and projected growth in activity with passenger numbers expected to increase over the next decades.

As such, reaching net zero in aviation will need unprecedented co-operation and will rest on progress made on an enabling policy framework which includes a sectoral approach as a guiding principle to achieve progress.

For the purpose of this written submission, Shell UK's response will therefore focus on the dedicated approach needed for the aviation sector to achieve net zero, and will outline the policy framework we consider is needed to support the development and deployment of Sustainable Aviation Fuels (SAF) in the UK, including fiscal measures.

Three pathways to decarbonisation

Shell supports a three-step approach to decarbonising the aviation industry.

Avoid

- adopting carbon-neutral energy on the ground and improving energy efficiency in the air through aircraft design, for example.
- the development of new net-zero emissions fuel technologies, such as hydrogen.

Reduce

- accelerating sustainable aviation fuel (SAF) deployment through blending biofuels and synthetic fuels with conventional jet fuel, allowing for a gradual introduction of the fuel into supply chains without the need to adapt engines.
- increased use of SAF by airlines.

Offset

- the use of high-quality, nature-based carbon credits to compensate for remaining carbon emissions.

The timeframe within which these three strategies will have their greatest impact differ. Some, such as nature-based carbon credits are available now. Some sustainable fuels are being used already but are not yet available to be deployed at scale. But net-zero emission



technologies, such as hydrogen-fuelled planes or electric aircraft, are in their infancy and will probably only affect sector emissions after 2050.

Shell believes that for the aviation sector to achieve net zero emissions (NZE) by 2050 a sectoral approach is needed to deliver significant investments and change across the whole value chain from aircraft OEMs, airlines, fuel suppliers, fuel producers, airports to, most importantly, consumers. In particular it is important to synchronise the demand and supply for low carbon energies such as SAF, PTL, hydrogen and electricity.

Key policies principles for support development of SAF to help deliver net zero in the aviation sector

Shell recognises that governments around the world face unique challenges and that different countries and regions are moving at different speeds to address aviation carbon emissions. However we believe that policies should be coordinated across sectors such as aviation, to help meet decarbonisation of the industry internationally.

As alternative lower carbon engine technologies are currently not widely available, SAF are the main viable technology to reduce substantially the sector's GHG emissions, especially in the shorter term.

SAF Mandates

- We are fully supportive in the UK of the Government's SAF mandate proposals, as we believe that ambitious and consistent mandates are key to create demand. The level of the mandate should be ambitious but consistent with the pace of building out supply capabilities and infrastructure. Shell supports the goal to have this at 10% of global jet fuel production by 2030 and at least 50% by 2050 across the world.
- Through regular reviews the mandate should be ramped up systematically over time, as the production scales up and commercialises.
- The mandate should initially allow the continued use of SAF made from recycled carbon fuels that are compliant with clear and globally agreed sustainability and CO2 emission criteria.
- The mandate should provide clear pathways to production of SAF from advanced feedstocks and synfuels, e.g. through a sub target.
- The mandates should allow obligated parties to use a book-and-claim approach to help meet the obligation during a transition period. This would ensure that time is given to develop sufficient supply chains to ensure that suppliers can ramp up coverage across the UK airports.



Price Support

- While SAF blending mandates are a necessary policy measure on their own they are insufficient to incentivise the necessary investments in supply at the scale needed to meet NZE by 2050
- Governments should provide or encourage long-term financing and offer fiscal incentives to encourage rapid scale up of novel, capital intensive SAF technologies.
- Policies should include for fiscal and financial policy instruments to allow for loan guarantees, accelerated depreciation or other investment tax credits, and grants to be awarded to SAF plants.
- It should also include other bankable policies for the SAF products such as a durable purchase agreement, e.g. a contract for difference (CfD) or a performance-oriented production tax credit of sufficient duration to cover the project's lifetime.
- The policy frame for SAF should be accompanied by a robust and rising carbon price to incentivise greater energy efficiency in aircraft and operations and to help partially bridge the long-term cost differential between SAF and conventional aviation fuel.

Support for Airlines to use SAF

- Governments should also consider the impact of early stage mandates on the airline industry and acknowledge the financial challenges the sector is facing. Support for sustained demand will be critical to encourage SAF producers to invest in increasing capacity.
- To provide incentives for airlines to use SAF or alternative fuels, airports, airspace service providers and regulators should be encouraged to provide operational incentives to airlines to use new technologies or alternative fuels through, for example, differentiated tariffs on landing or user fees at airports.

Aviation Fuel Taxation

- When considering taxing aviation fuel, Shell believes it should be based on CO₂ with a full exemption for SAF. Linking the rate of excise duty to the carbon/emissions intensity of the fuel would provide an additional incentive for low/no carbon aviation fuels.

In setting up policies for the aviation sector, Government should also ensure that new requirements do not conflict with existing transport policies (e.g., sustainability criteria for biofuels in the road sector), and ensure that administratively simple and practical systems can be used to monitor, report and verify compliance.



If you have any queries regarding this submission, please contact:

Madeline Whitaker
UK Corporate Relations Director
Shell International
London SE1 7NA
Madeline.Whitaker@Shell.com