Fact Sheet: EU and US policy approaches to advance SAF production

Context

In October 2021, the world's airlines took the bold step to achieve net zero carbon emissions by 2050. With broad acceptance that sustainable aviation fuel (SAF) will be required in substantial quantities to decarbonise the aviation sector, increasing attention is on the role of policy to enable this energy transition. While the aim of policy measures from the EU and the US are similar, the approach and configuration of such policy measures are different. This fact sheet attempts to highlight key aspects of each approach and share the airline industry view on effectiveness.

ReFuelEU Aviation

In July 2021, the European Commission published a package of legislative proposals branded "Fit for 55". One component of the package is the ReFuelEU proposal which aims to boost production and uptake of SAF. The proposal includes a blending mandate imposed on aviation fuel suppliers, with the obligation for the suppliers to ensure that all aviation fuel supplied to aircraft operators at European Union (EU) airports contains a minimum share of SAF, including a minimum share of synthetic fuel. The mandate is expected to start in 2025 with a minimum volume of SAF at 2%, increasing in five-year intervals to ultimately reach a minimum volume of 63% in 2050, of which 28% would consist of synthetic aviation fuels.

All airlines departing from EU airports will be obliged to uplift jet fuel prior to departure. The amount of jet fuel uplifted must correspond to the volume of jet fuel necessary to operate the planned flight, regardless of the destination. The yearly quantity of aviation fuel uplifted by a given aircraft operator at a given EU airport shall be at least 90% of the yearly aviation fuel required. The legislative proposal also associates with reporting obligations of aircraft operators to the European Union Aviation Safety Agency.

Procedure wise, ReFuelEU will follow the "EU Ordinary Legislative Procedure", whereby both the EU Parliament and the Council play an equal role in scrutinizing and amending the Commission's proposal to meet their respective views. Once the legislative bodies have agreed on their respective positions, they will need to find a compromise position before adopting the final legislation. The full process is expected to take between 8 and 18 months.

The U.S. Policies to Advance SAF

California Low Carbon Fuel Standard (CA-LCFS)

The CA-LCFS is designed to reduce GHG emissions in the transportation sector. The policy framework applies a system carbon intensity reduction to put a value on carbon reduction generated from renewable fuels. The regulation was updated in 2019 to recognize SAF as an eligible fuel to generate credits. The greenhouse gas benefits of SAF are quantified through life cycle assessment modelling that calculates the avoided emissions compared with conventional jet fuel. These credits can incentivise SAF production as they can then be sold to other obligated parties under the CA-LCFS.

The U.S. Renewable Fuel Standard (RFS)

The RFS was created by the Energy Policy Act of 2005 and was later updated through the Energy Independence and Security Act of 2007. This regulation focused on renewable fuel for ground transportation, requiring a minimum amount of renewable fuel on an annual basis, ramping up over time. The RFS offers SAF an "opt-in" approach, allowing SAF to generate compliance units (Renewable Identification Numbers "RINs") without aviation fuel generating compliance obligations. Currently, SAF has been determined to generate 1.6 RINs per gallon. This approach intends to advance SAF's competitiveness with renewable diesel,

while refraining from imposing a mandated SAF use obligation.

The U.S. Sustainable Skies Act

The U.S. Congress introduced the Sustainable Skies Act in May 2021, aiming to boost incentives to use SAF. The credit will start at 1.50USD per gallon for blenders that supply SAF with a demonstrated 50% or greater lifecycle GHG savings and rewards higher GHG achievement up to the maximum of 2USD per gallon. The legislation requires eligible SAF to utilize the full set of ICAO sustainability criteria as one of the safeguard provisions to ensure its environmental integrity. A complimentary proposal also includes a 1 Billion USD grant over five years to expand the number of SAF producing facilities in the U.S.

Biden Administration newly announced SAF policies

In early September 2021, the U.S. announced a new sustainable aviation fuel goal to increase the production of SAF to at least 3 billion gallons per year by 2030.

New actions include:

- A proposed SAF tax credit that aims to cut cost and rapidly scale domestic production of SAF.
- Continuous funding opportunities to support SAF projects and fuel producers, with the launch of a new SAF Grand Challenge to ramp up domestic production of SAF.
- Closely working with international partners to support the global scale up and availability of SAF.

IATA view on SAF policy approaches

IATA favours positive policies to accelerate the commercial deployment of SAF. A positive policy would see the transfer of publicly sourced revenues towards an incentive program or direct financial project support, without attached obligations or regulations. Positive policies also reduce project risk, making a business case more competitive relative to a “non-supported” policy scenario.

IATA favours policy options that have the potential to put the production of SAF on a more equal footing with the production of renewable fuel for ground transport.

Some of these options could include:

- Policy mechanisms that require a reduction in carbon intensity and allow aviation to opt-in to ground transport incentives
- SAF regulatory incentives including an energy multiplier
- Capital support and loan guarantees
- Feedstock subsidies or support mechanisms
- Tax relief policies and tax exemptions
- Financial market policies including green bond mechanisms and debt guarantees
- Accounting policies, including accelerated amortizations schedules
- Research and development programs and support

A mandate policy is not IATA’s preferred option for advancing the commercial deployment of SAF, especially when a mandate is not accompanied by positive measures such as the allocation of public funds to help reduce the price gap between SAF and convention jet fuel. While a mandate does provide a clear demand signal which can be important for new production business cases, it rarely delivers the optimal economic outcome, typically resulting in higher prices and imposing a dead-weight loss on consumers. On feature that can improve the functionality of a mandate policy is a book & claim SAF accounting system. This expands supply options for airlines and allows SAF to be delivered into fuel systems where logistics are optimal.