

# Sustainable Aviation Fuel Policy in the United States: A Pragmatic Way Forward



## Summary for policy makers

**T**here is an opportunity to invigorate Sustainable Aviation Fuel (SAF) production and use through pragmatic, sector-specific policy.<sup>1</sup> Aviation's current reliance on fossil fuels, its expected growth rate, the service lifespan of aircraft, and the lack of non-liquid fuel alternatives make it a challenging sector to decarbonize, especially compared with ground transportation.

To this end, the Atlantic Council's report, *Sustainable Aviation Fuel Policy in the United States: A Pragmatic Way Forward*, evaluates a menu of policy options for establishing a viable SAF sector in the United States with an emphasis on the policy types with demonstrated utility for helping establish other renewable energy sectors.

Steps that can be taken promptly are those that create an SAF-specific blender's tax credit, update SAF's excise tax treatment, and modify existing regulations (that already allow SAF to opt-in), so that SAF nears competitiveness with other renewable fuel types (like Biodiesel and Renewable Diesel). The below suggested modifications will assist in the near-term with addressing the incentive gap currently in place for SAF:

Existing Policy	Modification	Implementation Impact
<b>Renewable Fuel Standard (RFS)</b>	Modify the US Renewable Fuel Standard (RFS) to equalize the Renewable Identification Number (RIN) generation rates between SAF and Renewable Diesel.	Select this option to increase SAF competitiveness with other renewable fuel types.
<b>Low Carbon Fuel Standard (LCFS)</b>	Improve SAF's credit generation level by updating the fossil jet fuel emissions baseline that SAF is compared against.  Allow the use of book-and-claim accounting to recognize SAF blending outside of California.	Select this option to increase voluntary SAF blending. This modification is relevant to California regulators and may be relevant in the future to federal regulators, should this policy type be used. The proposed modifications could be opposed by existing renewable fuel producers supplying California as it may increase the amount of SAF recognized in the LCFS, thereby reducing demand for other renewable fuels.
<b>Encourage SAF blending with fossil jet fuel</b>	Create an enhanced SAF-specific blender's tax credit to encourage fuel production and introduction into the aviation fuel supply.	Utilize this option to incent sector investment and ongoing fuel production and distribution from established facilities both within and outside the United States.
<b>Jet Fuel Excise Tax</b>	Provide an excise tax exemption from the Airport and Airways Trust Fund's domestic commercial fuel tax to reduce the current price gap with fossil jet fuel.	Implement this option to reduce the price gap between SAF and fossil jet fuel without a regulatory blending requirement. This option could be supported by a broad aviation stakeholder group. This option could be implemented by applying the excise tax exemption granted to jet fuel in CARES Act § 4007 to SAF on a permanent basis.

<sup>1</sup> Sustainable Aviation Fuel (SAF) is defined as a certified, drop-in, distillate fuel that satisfies jet fuel form, fit, and function requirements, while meeting verifiable sustainability standards.

**Additional efforts can be considered to establish significant additional domestic SAF production. This report highlights the multiple categories of federal policy action that can be considered for coordinated implementation:**

Policy Category	Policy Options	Implementation Timeline
 <p><b>Attract capital to expand SAF supply</b></p>	<p>Loan guarantee programs</p> <p>Eligibility of SAF projects for master limited partnerships (MLPs)</p> <p>Accelerated depreciation/'bonus' depreciation</p> <p>Federal Business Investment Tax Credit (ITC) with SAF-specific mandate</p> <p>Performance-based tax credit akin to US Internal Revenue Code Section 45Q</p>	<p>Select options from this category for long-term sector development. Can be implemented in the immediate and near terms (2020-2025) as it uses existing approaches to renewable energy development. Can be pursued prior to establishing consistent SAF demand through regulation.</p>
 <p><b>Assist SAF facility operation</b></p>	<p>Blending incentives: Blender's Tax Credit (BTC)</p> <p>Production incentives: Producer's Tax Credit (PTC)</p> <p>Excise tax relief for unblended (neat) SAF from the Airport and Airways Trust Fund's domestic commercial fuel tax and/or domestic general aviation jet fuel tax</p> <p>Excise tax relief for blended (mixed) SAF from the Airport and Airways Trust Fund's domestic commercial fuel tax and/or domestic general aviation jet fuel tax</p>	<p>Select these options to further encourage sector investment and to reduce the production cost of SAF for operational facilities. Options can be implemented in the immediate and near terms (2020-2025). Incentives can be designed to phase out once the SAF sector becomes established and other regulatory aspects bridge the gap between production cost and price (e.g., the US RFS RIN system).</p>
 <p><b>Recognize SAF environmental benefits through carbon pricing and other systems</b></p>	<p>Make SAF zero-rated under carbon taxation or cap-and-trade systems as they develop</p> <p>Utilize other programs to recognize SAF's environmental co-benefits including lower air pollution and criteria air contaminant emissions</p>	<p>Select these options if carbon pricing systems are being developed for transportation fuels.</p> <p>Select this option to enable SAF eligibility for specific funding opportunities including modifying the Voluntary Airport Low Emissions program (VALE).</p>
 <p><b>Create structural SAF demand</b></p>	<p><b>Inclusion Of Jet Fuel in a Renewable Fuel Standard</b></p> <p>RFS Variation 1: Supply Incentive with SAF multiplier</p> <p>RFS Variation 2: SAF carveout within D5 (advanced) category</p> <p><b>Low Carbon Fuel Standard/Clean Fuel Standard</b></p> <p>LCFS Variation 1: Low Carbon Fuel Standard with ongoing SAF opt-in and updated credit generation baseline</p> <p>LCFS Variation 2: Low Carbon Fuel Standard with SAF eligibility for book-and-claim accounting when injected into pipeline (or airport fuel blending system)</p> <p>LCFS Variation 3: Low Carbon Fuel Standard with SAF opt in with a trigger threshold for aviation CI reduction schedule</p>	<p>Implement a selection of these options for a direct approach to addressing aviation emissions through regulation. Variations of these options that obligate SAF use may be opposed by aircraft operators and airlines due to SAF availability and price premium concerns. Options can be implemented in the immediate and near terms (2020-2025).</p>
 <p><b>Demonstrate government leadership</b></p>	<p>Government commitment to SAF use and carbon neutral air travel</p> <p>Government directed research and development activities</p> <p>Policy maker statement to establish direction of travel</p>	<p>Select this option for increasing SAF use without regulatory amendment to renewable fuel policies. Option likely supported by broad range of stakeholders. Able to be implemented in the immediate and near terms (2020-2025).</p>