

Getting the Landing Right

Ensuring that Taxpayers Only Subsidize Sustainable Aviation Fuels That Are Truly Sustainable

Topline: As the Biden administration decides which sustainable aviation fuels are eligible for new taxpayer subsidies, it must support high-integrity SAFS that meet rigorous environmental standards grounded in science. Details matter and ensuring the GREET model meets the Congressional requirements in the Inflation Reduction Act is critical. We can't afford to trade one environmental threat for another.

- **The Biden administration** will soon issue additional guidelines after DOE releases an updated GREET model on March 1st about which alternative fuels will qualify for federal refundable tax credits for sustainable aviation fuels created by the 2022 Inflation Reduction Act. This is a major decision, and the details matter if the aviation sector is going to truly decarbonize.
 - **Properly interpreting the IRA tax credits** for SAF will help reduce climate pollution and create a competitive advantage for U.S. alternative fuel suppliers.
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HIGH-INTEGRITY SAFS ARE THE BEST WAY TO ADDRESS CLIMATE POLLUTION FROM AVIATION.

Aircraft emissions are an important and growing source of climate pollution: If aviation were a country, it would be one of the world's top 10 greenhouse gas emitters. And demand for air travel is growing.

Clean, low-carbon SAF produces at least 50% less greenhouse gas emissions than petroleum-based jet fuel.

Not all sustainable aviation fuels are created equal:

Sustainable aviation fuels can be made from a variety of sources, including agricultural crops, waste, or electrochemical processes that form e-fuels. All alternative fuels, including e-fuels and biofuels, should be eligible to compete for taxpayer support.

How these raw materials are sourced and converted into SAF can sometimes cause deforestation and harm the climate -- which can increase the net greenhouse gas impacts of a given fuel. Evaluating the net greenhouse gas impacts of

different fuel sources will ensure we don't swap one kind of pollution for another.



THE TREASURY DEPARTMENT'S RESPONSE TO THE UPDATED GREET MODEL WILL DETERMINE WHICH SAF QUALIFY FOR FEDERAL REFUNDABLE TAX CREDITS.

Defining what fuels will qualify for IRA tax credits will depend on how the administration updates the analytical models that assess the impact of SAF types on greenhouse gas emissions.

The 2022 IRA legislation directed the Biden administration to adopt the Carbon Offsetting and Reduction Scheme for International Aviation, developed by the United Nations International Civil Aviation Organization, or a model that was substantially similar.

As written, the government's current analytical method, the Greenhouse Gases, Regulated Emissions and Energy Use in Transportation model, underestimates emissions generated by changes in land use, **opening the door to subsidizing fuels whose production could cause an increase in greenhouse gas emissions.** Using this method without revisions would trigger a need for additional administrative guidance, oversight and guardrails to protect environmental integrity.

As it updates the GREET model, the government needs to include the right safeguards so that large volumes of first-generation biofuels with significant land-use change emissions do not get a free pass to qualify for generous public subsidies, at the expense of overburdened communities and the ecosystems that protect our health.



THE ADMINISTRATION MUST AVOID SIX DANGEROUS MISTAKES AS IT UPDATES THE GREET MODEL.

1. The IRA's sustainability & certification standards can't be watered down.

All third-party sustainability certification efforts must meet statutory requirements and current sustainability ICAO CORSIA certification standards.

“Details matter and interpreting the GREET model in line with Congressional mandates in the Inflation Reduction Act is critical. We can't afford to trade one environmental threat for another.”

2. Estimates of greenhouse gas emissions from indirect land use can't be cherry-picked when calculating the risk of dangerous deforestation.

Emissions from indirect land use (when crops are grown for biofuels instead of food and feed) must be properly accounted for in a way that is consistent with ICAO's CORSIA guidelines.

3. Carbon sequestration credits for farmland should not be accounted for until there is more scientific certainty around the climate benefits. The benefits of carbon enhancements in soils are difficult to demonstrate.

The threat to avoid: Accounting for soil carbon sequestration credits when, as the EPA has noted, additional data and scientific evaluation have not been provided to integrate climate smart agricultural practices into proving the benefits of carbon enhancements in soils.

4. Alternative aviation fuels that rely heavily on coal, gas or oil should not be allowed to use carbon capture and storage credits to disguise their actual impact.

Ensure that carbon capture and storage practices don't reward or hide the impact of alternative aviation fuels that rely on disproportional amounts of unsustainable fossil fuels.

The threat to avoid: Allowing fuel makers to use carbon capture and storage efforts to evade the IRA's requirements that sustainable fuels actually reduce emissions by 50% or more than current aviation fuel.

For more information, please contact Pedro Piris-Cabezas, Senior Director, Global Transportation, ppiris@edf.org

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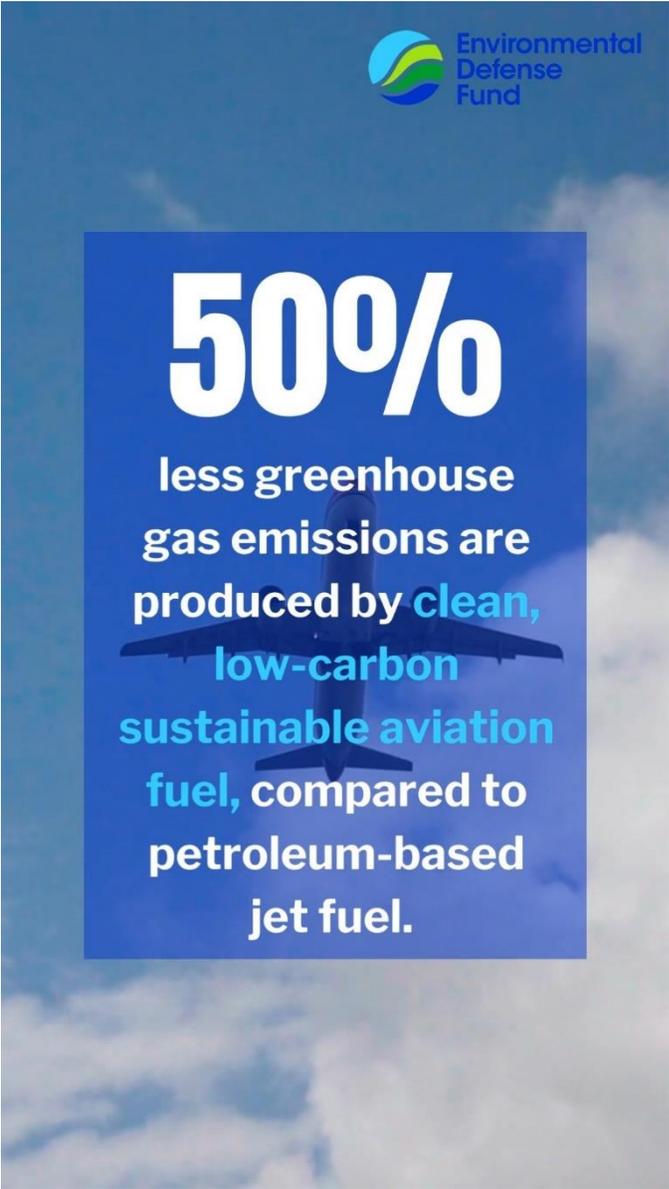
5. Taxpayer money should not be given to fuel producers that use “book-and-claim” accounting practices for feedstocks and energy inputs to claim climate benefits disconnected from their supply chains.

6. Lowballing the emissions generated over the lifecycle of an aviation fuel should not be permitted.

Fuel producers must not be permitted to manipulate and artificially depress the emissions actually generated over the lifecycle of an aviation fuel.

The threat to avoid: Falsely depressing the greenhouse gas emissions attributable to land-use changes by artificially stretching out amortization periods. Underestimating emissions, from feedstock production or allowing users to reallocate emissions among co-products to claim lower carbon intensity.

FEDERAL TAX CREDITS SHOULD BE RESERVED FOR SAFS THAT MEET RIGOROUS CLIMATE AND ENVIRONMENTAL STANDARDS.



50%
less greenhouse gas emissions are produced by clean, low-carbon sustainable aviation fuel, compared to petroleum-based jet fuel.

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