

April 1, 2024

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Avenue, SW
Washington, DC 20250

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

The Honorable Jennifer Granholm
Secretary
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

The Honorable Michael Whitaker
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 2059

Re: 40B(e)(2) GREET Model Must Use a 30-Year Time Period for Emissions Accounting to Satisfy the Criteria of Section 211(o)(1)(H) of the Clean Air Act (CAA)

Dear Members of the Interagency Working Group,

As the Sustainable Aviation Fuels (SAF) Lifecycle Analysis Interagency Working Group (IWG) continues to develop a modified GREET model (“40B(e)(2) GREET”) for the purposes of implementing the Section 40B credit, I write to urge you to ensure the modified model’s time period for greenhouse gas (GHG) emissions accounting is consistent with methods that have already been determined by the U.S. Treasury to satisfy the criteria of Section 211(o)(1)(H) of the Clean Air Act (CAA). More specifically, the 40B(e)(2) GREET model under development by the IWG **must use a 30-year time period for emissions accounting** in order to satisfy the criteria of Section 211(o)(1)(H) of the Clean Air Act (CAA).

I. Background

On December 15, 2023, the U.S. Treasury released Notice 2024-6 regarding the SAF credit provision in Section 40B of the Internal Revenue Code (I.R.C.).¹ The Notice provided further guidance on which lifecycle GHG methodologies may be used to calculate SAF emissions reduction percentages under the 40B program.

In addition to the methodology specified in I.R.C. Section 40B(e)(1) (i.e., the most recent Carbon Offsetting and Reduction Scheme for International Aviation, or “CORSIA”, method), Section 40B(e)(2) provides that the emissions reduction percentage may alternatively be calculated in

¹ Internal Revenue Service (IRS). Notice 2024-6 “Sustainable Aviation Fuel Credit; Lifecycle Greenhouse Gas Emissions Reduction Percentage and Certification of Sustainability Requirements Related to the Clean Air Act; Safe Harbors.” December 15, 2023. <https://www.irs.gov/pub/irs-drop/n-24-06.pdf>

accordance with any methodology that 1) is similar to the most recent CORSIA methodology, and 2) satisfies the criteria under Section 211(o)(1)(H) of the Clean Air Act (CAA).²

Notice 2024-6 clarified that the methodology used by the U.S. Environmental Protection Agency (EPA) in 2010 to determine lifecycle GHG emissions under the Renewable Fuel Standard (RFS) “is similar to the CORSIA methodology” and “satisf[ies] the statutory definition in Section 211(o)(1)(H) of the CAA.”³ Treasury further clarified that “...the IRS will accept an emissions reduction percentage of the SAF synthetic blending component for a jet fuel that qualifies as renewable fuel under the RFS program.”⁴

In the same Notice, Treasury stated that the Argonne National Laboratory’s current GREET model and other existing GREET-based models “...do not satisfy the applicable requirements.”⁵ According to the Treasury, “...as relevant to 40B(e)(2), the only current methodology that [EPA] has determined satisfies the CAA Section 211(o)(1)(H) criteria is the methodology, modeling, and analysis the EPA developed in 2010 for the RFS program and applied in subsequent RFS rulemakings.”⁶

The Treasury Notice stated that the Department of Energy (DOE) and other federal agencies are collaborating to develop a version of the GREET model that would satisfy the Section 211(o)(1)(H) CAA criteria and other IRC Section 40B(e)(2) requirements. Concurrently with Notice 2024-6, DOE and the other members of the IWG announced that the “...modified version of GREET will incorporate new data and science, including new modeling runs specific to key feedstocks and processes for use in aviation fuel.”⁷

II. To Satisfy the Criteria of CAA 211(o)(1)(H), a 30-Year Time Period *Must* be Used for Emissions Accounting

A crucially important component of lifecycle GHG emissions analysis for crop-based SAF is the time period used to account for speculative emissions from model-derived land use changes. For the lifecycle analysis conducted by EPA for the RFS program—which Notice 2024-6 described as the “the only current methodology that...satisfies the CAA 211(o)(1)(H) criteria”—EPA used a time period of 30 years to account for modeled emissions from direct and indirect land use changes. In justifying its selection of a 30-year time period, EPA noted that the decision was “consistent with the latest climate science” and “[b]ased on input from the expert peer review and public comments.”⁸ EPA considered the use of other time periods (e.g., 100 years and 25 years) and discount rates for emissions accounting, but ultimately settled on a 30-year timeframe with no discount. EPA has not

² I.R.C. § 40B(e)(1)-(2)

³ IRS at 6.

⁴ IRS at 7.

⁵ IRS at 11.

⁶ *Id.*

⁷ Sustainable Aviation Fuels Lifecycle Analysis Interagency Working Group. “Interagency Statement by the Agencies Participating in the Sustainable Aviation Fuels Lifecycle Analysis Working Group.” December 14, 2023.

<https://www.energy.gov/articles/interagency-statement-agencies-participating-sustainable-aviation-fuels-lifecycle-analysis>

⁸ U.S. Environmental Protection Agency. “Renewable Fuel Standard Program (RFS2) Regulatory Impact Analysis.” EPA-420-R-10-006. February 2010. At 422-423.

altered the 30-year time period in subsequent rulemakings and still uses 30 years as the time period for new RFS lifecycle GHG assessments.

Thus, to satisfy the criteria of CAA Section 211(o)(1)(H), as interpreted by EPA during the initial RFS rulemaking process and in subsequent rules, the 40B(e)(2) GREET model under development by the IWG must also use a 30-year time period for emission accounting (i.e., the same time period that was part of the “methodology, modeling, and analysis” used in 2010 for the RFS program). Using a different time period (e.g., 25 years) for emissions accounting would render the upcoming 40B(e)(2) GREET model inconsistent with CAA Section 211(o)(1)(H). Failing to use a 30-year time period would also render the modified GREET model inconsistent with the only “similar methodology” (i.e., EPA’s RFS program) that has been approved, to date, by Treasury for emissions calculations under the 40B credit.

III. Conclusion

For the reasons described above, the 40B(e)(2) GREET model under development by the IWG must use a 30-year time period for emissions accounting in order to satisfy the criteria of Section 211(o)(1)(H) of the Clean Air Act (CAA), as interpreted and implemented by EPA. Thank you for your consideration of this information and we look forward to the expeditious release of the modified 40B(e)(2) GREET model.

Sincerely,

A handwritten signature in black ink that reads "Geoff Cooper". The signature is written in a cursive, flowing style.

Geoff Cooper
President and CEO