



## ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION

WASHINGTON, D.C. 20460

April 25, 2024

Ms. Aviva Aron-Dine  
Acting Assistant Secretary, Tax Policy  
U.S. Department of Treasury  
1500 Pennsylvania Avenue, Room 3120  
Washington, D.C. 20220

Dear Acting Assistant Secretary Aron-Dine:

On December 13, 2023, the U.S. Environmental Protection Agency (EPA) wrote to provide the U.S. Department of Treasury (UST)<sup>1</sup> with information regarding certain models and methodologies related to lifecycle greenhouse gas (GHG) emissions calculations in association with UST's implementation of the sustainable aviation fuel (SAF) tax credit, which was enacted into section 40B of the Internal Revenue Code (IRC) by the Inflation Reduction Act (IRA). The EPA writes today in response to UST's request that we follow up on a specific issue identified in that December 2023 letter.

The EPA previously noted that IRC section 40B(e) provides that the term "lifecycle greenhouse gas emissions reduction percentage" means the percentage reduction in lifecycle greenhouse gas emissions as defined in accordance with "the most recent Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) which has been adopted by the International Civil Aviation Organization with the agreement of the United States" or "any similar methodology which satisfies the criteria under section 211(o)(1)(H) of the Clean Air Act." 26 U.S.C. 40B(e). The EPA explained that it has interpreted Clean Air Act (CAA) section 211(o)(1)(H) in the context of the Act's Renewable Fuel Standard (RFS) program. In that context, the EPA had previously determined that a certain model—the version of the Argonne National Laboratory's (ANL) Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model that existed in 2010—is not sufficient to calculate lifecycle GHG emissions for purposes of CAA section 211(o)(1)(H). The EPA also explained that the more recent version of ANL GREET that existed as of December 2023 similarly did not satisfy the relevant CAA criteria.

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<sup>1</sup> Letter from Joseph Goffman, Principal Deputy Assistant Administrator for the Office of Air and Radiation, U.S. Environmental Protection Agency, to Lily Batchelder, Assistant Secretary for Tax Policy, U.S. Department of Treasury (December 13, 2023), available at <https://home.treasury.gov/system/files/136/Final-EPA-letter-to-UST-on-SAF-signed.pdf>.


Specifically, the EPA explained that methodologies consistent with its interpretation of CAA section 211(o)(1)(H) must include consideration of, *inter alia*, significant indirect emissions from land use, crop production, and livestock emissions. While the version of ANL GREET that existed as of December 2023 included indirect land use change emissions, it did not include consideration of significant indirect emissions from crop production or livestock.

Since that time, the EPA has been working with our federal partners in the SAF Interagency Working Group (IWG) that includes the EPA, UST, the U.S. Departments of Agriculture and Energy, and the Federal Aviation Administration on modifications to GREET that would be consistent with the direction from Congress on SAF in the context of IRC section 40B(e). Pursuant to these efforts, ANL has developed and is preparing to release a new version of GREET—40BSAF-GREET 2024—that is intended for use in calculation of lifecycle GHG emissions of SAF production.<sup>2</sup>

40BSAF-GREET 2024 includes consideration of significant indirect emissions from land use, crop production, and livestock emissions and therefore addresses the emissions that the EPA has previously identified as absent from earlier versions of the GREET model. That is, the EPA believes 40BSAF-GREET 2024 addresses the issues identified in its December 2023 letter.

The EPA thanks UST and the SAF IWG for working diligently and cooperatively on the development of 40BSAF- GREET 2024 and looks forward to continuing to work with its partners towards successful implementation of IRC section 40B.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joseph Goffman', is written over the typed name and title.

Joseph Goffman  
Assistant Administrator

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<sup>2</sup> 40BSAF-GREET 2024 was developed specifically for use in implementing the IRC section 40B tax credit. This is a distinct legal and policy context from the EPA's RFS program. As such, use of 40BSAF-GREET 2024 in the RFS program may or may not be appropriate; the EPA is not making any determination about such appropriateness at this time.