



ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION

WASHINGTON, D.C. 20460

January 8, 2025

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

Dear Deputy Assistant Secretary Aron-Dine:

The U.S. Department of Treasury (UST) has requested the U.S. Environmental Protection Agency's (EPA or Agency) input regarding certain models and methodologies related to lifecycle greenhouse gas (GHG) emissions calculations in association with UST's implementation of the tax credit for clean fuel production, which was enacted into section 45Z of the Internal Revenue Code (IRC) by the Inflation Reduction Act (IRA). The EPA writes today in response to UST's request.

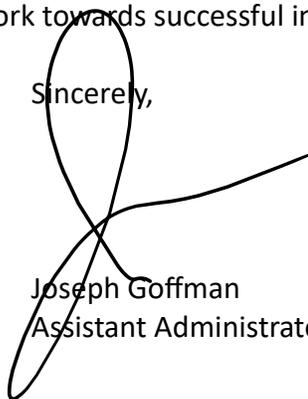
Section 45Z of the IRC requires the Secretary of the Treasury to "publish a table which sets forth the emissions rate for similar types and categories of transportation fuels based on the amount of lifecycle greenhouse gas emissions (as described in section 211(o)(1)(H) of the Clean Air Act (42 U.S.C. 7545(o)(1)(H)), as in effect on the date of the enactment of this section) for such fuels, . . . , which a taxpayer shall use for purposes of this section." 26 U.S.C. 45Z(b)(1)(B)(i).

For non-aviation fuel, IRC section 45Z requires lifecycle GHG emissions to be "based on the most recent determinations under the Greenhouse gases, Regulated Emissions, and Energy use in Transportation [GREET] model developed by Argonne National Laboratory, or a successor model (as determined by the Secretary)." 26 U.S.C. 45Z(b)(1)(B)(ii). For sustainable aviation fuel, IRC section 45Z provides that the lifecycle greenhouse gas emissions of such fuel may be determined in accordance with "(I) the most recent Carbon Offsetting and Reduction Scheme for International Aviation [CORSA] which has been adopted by the International Civil Aviation Organization with the agreement of the United States, or (II) any similar methodology which satisfies the criteria under section 211(o)(1)(H) of the Clean Air Act" 26 U.S.C. 45Z(b)(1)(B)(iii).

Section 211(o)(1)(H) of the Clean Air Act (CAA) provides that “lifecycle greenhouse gas emissions’ means the aggregate quantity of greenhouse gas emissions (including direct and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator, related to the full fuel lifecycle” As explained in the EPA’s April 25, 2024, letter to UST,¹ the Agency has interpreted this provision to require consideration of, *inter alia*, significant indirect emissions from land use, crop, production, and livestock. The EPA has also found that not all versions of the GREET model address these categories of indirect emissions, and that versions of GREET lacking these emissions are not sufficient to calculate lifecycle GHG emissions consistent with CAA section 211(o)(1)(H).² However, as explained in the April 25, 2024 letter, the version of GREET developed by Argonne National Laboratory for use in support of the IRC section 40B sustainable aviation fuel credit considers all three. The EPA similarly finds that the version of GREET developed in support of the IRC section 45Z clean fuel production credit, referred to as 45ZCF-GREET, includes consideration of these three categories of indirect emissions.

The EPA thanks UST for its continued partnership in the development of frameworks to implement the IRA, and looks forward to continuing to work towards successful implementation of IRC section 45Z.

Sincerely,

A handwritten signature in black ink, appearing to be 'Joseph Goffman', written over the typed name.

Joseph Goffman
Assistant Administrator

¹ Letter from Joseph Goffman, Assistant Administrator for the Office of Air and Radiation, U.S. Environmental Protection Agency, to Aviva Aron-Dine, Acting Assistant Secretary, Tax Policy, U.S. Department of Treasury (April 25, 2024), available at <https://home.treasury.gov/system/files/136/April-2024-EPA-letter-to-UST-on-SAF-signed.pdf>.

² See 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, 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>.