



77 West Wacker Drive
Suite 4600
Chicago, Illinois 60601

312-634-8100

December 2, 2022

SUBMITTED VIA FEDERAL RULEMAKING PORTAL AND USPS

Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-58)
Room 5203
P.O. Box 7604, Ben Franklin Station
Washington, D.C. 20044

RE: Notice 2022-58 Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production

Dear Sir or Madam:

Archer-Daniels-Midland Company ("ADM") appreciates the opportunity to submit the following comments in response to the Internal Revenue Service's ("IRS") Notice 2022-58, Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production.

As discussed in greater detail below, our comments relate to (1) the use of the Greenhouse gases, Regulated Emissions, and Energy use in Transportation ("GREET") model for lifecycle greenhouse gas ("GHG") emissions of sustainable aviation fuel ("SAF"), (2) ensuring that the methodology for determining a taxpayer's SAF emissions rate is flexible and takes into account taxpayer-specific facts and circumstances, and (3) the need for clarifying guidance with respect to the determination of credit eligibility where one qualified facility is connected to another qualified facility.

We also express our general support for the comment letters submitted by Clean Fuels Alliance America and Growth Energy, and the recommendations provided therein.

Background

As a global leader in agriculture, nutrition and sustainable products, ADM has connected the harvest to the home for 120 years. At ADM, sustainable practices and a focus on environmental responsibility are foundational to our purpose, culture and strategy. Utilizing our unique position in the agricultural value chain, including relationships with more than 200,000 farmers and an unparalleled global origination, transportation and processing network, ADM is enhancing sustainability across the multiple value chains in

which we operate. We work with growers, supporting them with personalized services and innovative technologies, and partnering with them to develop and enhance sustainable and regenerative practices. Our broad array of products from nature are meeting needs for more sustainable solutions, including alternatives to petroleum-based products, such as ethanol, biodiesel and SAF.

At ADM, we minimize our impacts on the environment by following different foundational procedures to ensure we meet our environmental obligations. Through our Strive 35 initiative, we are actively working to improve the efficiency of our facilities and vehicles, finding alternative uses for waste, reusing and recycling water, and sequestering carbon at our onsite carbon capture and storage facility. Specifically, we aim to reduce by 2035 our absolute Scope 1, Scope 2 and Scope 3 GHG emissions by 25 percent (from our 2019 baseline), and to become a net-zero company by 2050 at the latest. To help achieve these goals, ADM considers the SAF incentives in the Inflation Reduction Act (“IRA”) an important opportunity to further our GHG emissions reduction goals while also helping secure a sustainable fuel source for aviation travel and commerce.

I. The GREET Model is a similar methodology to the CORSIA model that satisfies the criteria under section 211(o)(1)(H) of the Clean Air Act and should be available for determining lifecycle GHG emissions of SAF.

Sections 13203 and 13704 of the IRA provide two new tax credits for SAF – new sections 40B and 45Z of the Internal Revenue Code (“Code” or “I.R.C.”), respectively – that are predicated on the reduction of GHG emissions. Under both new credits, lifecycle GHG emissions of SAF may be determined under (1) the Carbon Offsetting and Reduction Scheme (“CORSIA”) model or (2) any similar method that satisfies the criteria under 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 enactment of the IRA.¹ For the reasons outlined below, the GREET model satisfies the statutory requirements for both Code section 40B and 45Z.

GREET model satisfies statutory requirements. The Environmental Protection Agency (“EPA”) has already determined that the GREET model meets the criteria under section 211(o)(1)(H) of the Clean Air Act. Specifically, the EPA has developed rules for measuring GHG emissions of transportation fuels based on a life-cycle analysis of such fuels.² To effectuate these rules, the EPA adopted the GREET model,³ developed by the Argonne National Laboratory, to calculate life-cycle GHG emissions of transportation fuels.⁴ The EPA’s acceptance of the GREET model demonstrates that it satisfies the

¹ I.R.C. § 40B(e)(2); *id.* § 45Z(b)(1)(B)(iii)(II). While new Code section 40B is scheduled to expire at the end of 2024, the same emissions-reduction methodologies will continue to apply under new Code section 45Z beginning in 2025.

² *In re Gas Co., LLC*, 465 P.3d 633, 652 (Haw. 2020) (citing Clean Air Act § 211(o), 42 U.S.C. § 7545(o)(1)(H)).

³ *GREET Model*, U.S. Dep’t of Energy (2022), <https://greet.es.anl.gov/> (last visited Nov. 30, 2022).

⁴ *In re Gas Co., LLC*, 465 P.3d at 652 (citing Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program (“RFS”), 72 Fed. Reg. 23900, 23907 (May 1, 2007) (codified at 40 C.F.R. pt. 80)) (explaining how the EPA utilized GREET in calculating life-cycle GHG emissions for its RFS Program).

criteria under section 211(o)(1)(H) of the Clean Air Act, thereby meeting the alternative standard to the CORSIA model for purposes of Code sections 40B and 45Z.

Moreover, the EPA has expressly stated that the GREET model is similar to the CORSIA model. When analyzing a variety of models and data sources to estimate landfill emissions, the EPA considered the GREET model and CORSIA model, among others.⁵ While noting that the models differ in their default assumptions and can be applied for different purposes, the EPA found that these models and methodologies “*have many similarities*.”⁶ thereby supporting the similarity in methodology for GREET to be treated as an alternative standard for establishing the GHG emissions rate under Code section 40B and 45Z.

GREET model achieves legislative purpose. In addition to satisfying the statutory requirements as an alternative emissions-rate methodology, the GREET model also supports the legislative purpose underpinning Code sections 40B and 45Z. The tech-neutral provisions in the IRA demonstrate Congress’ intent, in line with President Biden’s overall climate goals, to work towards a country that is carbon-free with net-zero emissions.⁷ These tax credits are intended to help achieve that goal. Eligibility for the new credits under Code sections 40B and 45Z, as well as the amount of each credit, is tied to a fuel’s lifecycle GHG emissions. Accordingly, a model that contemplates all of those inputs accurately and consistently is essential to the integrity of the calculation, and the consequent effectiveness of the credits in achieving the IRA’s climate objectives.

To that end, the GREET model takes into account better land management and carbon sequestration, both of which are critical tools to reduce greenhouse gas emissions. In contrast, a flaw in the CORSIA model is its treatment of land-use changes and land-management practices. Rather than incentivizing farmers to make changes to their existing properties to reduce GHG emissions, the CORSIA model effectively penalizes longstanding farmers in America’s heartland for doing so, and instead encourages expansion into undeveloped, but high carbon-storage, areas like forests and wetlands.

GREET model reduces administrative burdens. Code section 45Z(b)(1)(B)(ii) specifically calls for the emissions rate for non-aviation fuels to be determined under the GREET model, while clause (iii) allows for an alternative to the CORSIA model to be applied to determine the rate for aviation fuel, as discussed above. Taxpayers would benefit from a uniform application of the GREET model as a consistent methodology across all fuel types covered by Code section 45Z, especially for taxpayers that produce both aviation and non-aviation fuels, because in some cases the non-aviation fuels become an input for aviation fuel. It makes little sense for taxpayers to have to apply

⁵ Renewable Fuel Standard (RFS) Program: RFS Annual Rules, 86 Fed. Reg. 72436-01 (Dec. 21, 2021).

⁶ *Id.* (emphasis added).

⁷ *FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies*, The White House (Apr. 22, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/> (last visited Dec. 1, 2022).

different GHG-emissions methodologies simply because fuels are produced for different end use when a single methodology can accurately assess the emissions rates.⁸

GREET better reflects U.S. farm practices. The GREET model has a lower penalty for indirect land use change attributed to the production of products like corn and soy for biofuels. The GREET model has the flexibility that will encourage America’s farmers to try to close the gap with less carbon-intense products through their good land management practices.

For the foregoing reasons, we request that Treasury and the IRS designate the GREET model as a qualifying and similar methodology to the CORSIA model for purposes of determining the GHG-emissions rate under Code sections 40B(e)(2) and 45Z(b)(1)(B)(iii)(II).

II. The methodology for determining an SAF’s emissions rate should take into account facts and circumstances relevant to each taxpayer.

Code section 45Z requires the Secretary to publish annually a table that sets forth the emissions rate for similar types and categories of transportation fuels based on the amount of lifecycle GHG emissions, which the taxpayer shall use in the determination of the allowable credit.⁹ The provision modifies the foregoing general rule in the case of non-aviation and aviation fuels, as discussed above, with the latter being determined based on either the CORSIA model or a similar methodology satisfying the criteria under section 211(o)(1)(H) of the Clean Air Act.¹⁰ In the case of a transportation fuel for which an emissions rate has not been published, a taxpayer may file a petition with the Secretary for determination of the emissions rate with respect to such fuel.¹¹

The statutory language provides for taxpayer-specific determinations of carbon intensity. On this issue, we support the comment letter submitted by Growth Energy, and the recommendations provided therein for the publication of a table under Code section 45Z(b)(1)(B)(i) that reflects the various means by which farmers and producers can affect the lifecycle emissions of their fuel. We believe that such a table should serve as a baseline amount for taxpayers producing the respective fuel and would reduce the burden of determining the GHG emissions rate for such fuel. At the same time, such a baseline would still allow a taxpayer that can demonstrate that its specific fuel is different from, and therefore not included on, the table the opportunity to apply for a provisional emissions rate pursuant to Code section 45Z(b)(1)(D). The statute already contemplates that there may be no single emissions rate for all taxpayers that produce a particular

⁸ Along those lines, at the state level, the GREET modeling approach is used for other programs, such as the low carbon fuel standard in the state of California.

⁹ By contrast, the clean-fuels credit under Code section 40B is based on a taxpayer’s determination that its fuel meets the lifecycle GHG emissions-reduction percentage, subject to the registration and third-party compliance verification requirements in subsection (f). As such, Code section 40B largely adheres to the traditional approach of taxpayer’s determining qualification and claiming the credit on an annual tax return, subject to IRS review on audit.

¹⁰ I.R.C. § 45Z(b)(1)(B)(i).

¹¹ I.R.C. § 45Z(b)(1)(D).

biofuel when it establishes various methodologies in Code section 45Z(b)(1)(B)(iii)(II) for calculating the amounts in the table for SAF.

While the petition process is not statutorily defined, it should be designed in an efficient manner that provides taxpayers with the flexibility to account for their innovative production and farming processes, while not overburdening the IRS with additional compliance responsibilities. In effect, such a process is inherently part of the registration requirement under Code section 4101 for clean-fuels producers claiming the credits under either Code sections 40B¹² or 45Z¹³ with the certification to be provided by a third-party compliance validator.

Individual determinations of GHG reductions is consistent with statutory intent.

Consistent with the IRA's purpose of encouraging clean-fuels production and overall environmental objectives, Treasury and the IRS should ensure that taxpayers are incentivized through the clean-fuels credits to apply GHG-reduction practices across their fuel's complete lifecycle. If the table of annual values referred to in Code section 45Z(b)(1)(B)(i) is applied as a one-size-fits-all approach for taxpayers producing fuel based on a listed feedstock, with no incentive value for taxpayer-specific investments in emission-reduction technology or other processes, there will be no economic incentive to use any of the following technologies: renewable electricity, biomass or renewable natural gas, cover crops, crop tillage, low-carbon ammonia, and others. Biofuel is a commodity, and without incentives in the Code to support the use of these agricultural and processing technologies that reduce GHG emissions, there may not be a clear way to monetize those incremental costs.

III. Guidance should clarify that a taxpayer may claim the Code section 45Z credit with respect to a qualified facility that is minimally connected to a separate facility qualifying for other credits.

For purposes of the Code section 45Z credit, a qualified facility does not include any facility for which one of the following credits is allowed under Code section 38 for the taxable year: (i) the credit for production of clean hydrogen under Code section 45V, (ii) the credit for under Code section 46 to the extent attributable to the Code section 48(a)(15) credit for any specified clean hydrogen production facility for which an election has been made, or (iii) the credit for carbon oxide sequestration under Code section 45Q.¹⁴

Taxpayers need guidance regarding how this anti-stacking rule will apply. For example, assume that a taxpayer owns Facility 1, which produces ethanol, and Facility 2, which produces SAF from the ethanol produced at Facility 1. The facilities are connected via a pipeline that carries the ethanol from Facility 1 to Facility 2. Both facilities are functionally unrelated other than the feedstock pipeline (although they could share some other non-dependent site services purely for efficiency purposes (e.g., outside battery limit support services, such as steam)). The taxpayer claims the Code section 45Q credit

¹² I.R.C. § 40B(f).

¹³ I.R.C. § 45Z(f)(1)(A).

¹⁴ I.R.C. § 45Z(d)(4)(B).

with respect to carbon sequestration activities at Facility 1, and intends to claim the Code section 45Z credit with respect to SAF production activities at Facility 2. Are both credits allowed?

Analogy to other contexts. The IRS has provided guidance in other cases regarding the determination of whether facilities are considered separate facilities. For example, in the context of Code section 45 electricity production credit, IRS Notice 2013-29¹⁵ provides the following definition of a “facility”:

In general. A facility (within the meaning of Code section 45(d)) generally includes all components of property that are functionally interdependent. Components of property are functionally interdependent if the placing in service of each of the components is dependent upon the placing in service of each of the other components in order to generate electricity. For example, on a wind farm for the production of electricity from wind energy, [*7] an electricity-generating wind turbine, its tower, and its supporting pad comprise a single facility. Each such facility can be separately operated and metered and can begin producing electricity separately. See Rev. Rul. 94-31, 1994-1 C.B. 16.

Similar distinctions were made in the following precedents:

- Each of a wind farm’s wind turbines, together with its tower and supporting pad, originally placed in service after 1993 but before July 1, 1999, is treated as a separate qualified facility under Code section 45(c)(3) for credit purposes.¹⁶
- For open-loop biomass facilities and Code section 45(d)(3), each power plant that is operated as a separate integrated unit is treated as a separate facility.¹⁷
- Solely for purposes of determining whether construction of a qualified facility or carbon capture equipment has begun for purposes of the Code section 45Q credit, multiple qualified facilities or units of carbon capture equipment that are operated as part of a single project (along with any components of property that serve some or all such qualified facilities or units of carbon capture equipment) may be treated as a single qualified facility or unit of carbon capture equipment. Whether multiple qualified facilities or units of carbon capture equipment are operated as part of a single project will depend on the relevant facts and circumstances (with a list of 8 factors provided).¹⁸
- In a letter ruling, the IRS determined that even though Company A’s facility is a new facility, it is used in connection with Company B’s facility of which more than 50 percent of the basis of that facility is attributable to construction, reconstruction, or erection before October 1, 1978. It, therefore, meets the definition of an existing facility in Code section 48(l)(10).¹⁹

Thus, while the statute makes clear that a taxpayer may not claim the Code section 45Z with respect to any facility for which Code sections 45V, 46 (with respect to 48(a)(15)),

¹⁵ 2013-1 C.B. 1085, 2013-20 I.R.B. 1085.

¹⁶ Rev. Rul. 94-31.

¹⁷ I.R.S. Notice 2008-60, § 3.01(1).

¹⁸ I.R.S. Notice 2020-12, § 8.01(1).

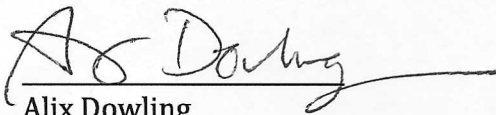
¹⁹ I.R.S. P.L.R. 8311066 (Dec. 14, 1982).

or 45Q is allowed, ADM requests that Treasury and the IRS adopt a standard consistent with IRS Notice 2013-29 for purposes of defining a qualified facility under Code section 45Z, and applying the anti-stacking rule under Code section 45Z(d)(4).

IV. Conclusion

Thank you for considering ADM's views and recommendations. If you have any questions or would like to discuss the forgoing in greater detail, please contact me at Alix.Dowling@adm.com.

Sincerely,

A handwritten signature in black ink that reads "Alix Dowling". The signature is written in a cursive style and is positioned above a horizontal line.

Alix Dowling
VP Global Tax