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December 3, 2022

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

Re: Comments on IRS Notice 2022-58

Dear Commissioner O'Donnell :

This comment letter is submitted by Bayer Crop Science (“Bayer”) in response to the request from the Department of Treasury under Notice 2022-58 (“Notice”) for Comments on Credits for Clean Hydrogen and Clean Fuel Production. Bayer is a global enterprise with core competencies in the life science fields of health care and climate sustainable agriculture with nearly 25,000 employees in 300 sites across the United States. Bayer’s products and services are designed to help people and the planet thrive by committing to innovation and the principle of sustainable development.

Bayer highlights in this letter several suggestions for ways for Treasury to design regulations that accommodate the rapid pace that climate-targeted technologies are evolving in the agriculture industry. Bayer respectfully recommends that Treasury facilitates the deployment of capital into the clean energy transition in a manner that spurs innovation across the industry. This will involve fulsome inclusion of verified data sets including additional existing calculators (e.g., the Feedstock Carbon Intensity Calculator (“FD-CIC”)) into the GREET Model for purposes of clean fuel production tax credits under Section 45Z of the Internal Revenue Code of 1986. Bayer also wishes to emphasize that Treasury and the IRS have the ability to encourage the continuous improvement of data collection, analytics technologies, and systems to more accurately determine “emission rates” in cooperation with the private sector.

- I. As the agriculture industry rapidly transitions to more sustainable and less greenhouse gas intensive practices, Treasury recognizes this dynamic in establishing rules for Section 45Z that accommodates innovation over time.**

Bayer views its role as a catalyst within the agriculture industry as it assists farmers actualize their ability to adopt climate-smart practices on their farms using cutting-edge technological solutions. Bayer recognizes the current transition taking place within agriculture to adopt lower GHG emission practices and is positioned to deliver carbon intensity reductions by pioneering low carbon farming solutions to deliver carbon intensity reductions to renewable fuels, including sustainable aviation fuels (SAF). Given the increased emphasis on climate-smart agriculture, Bayer and other private sector actors uniquely are positioned to serve the agriculture industry and make an impact on the global climate improvement efforts. For example, Farm Management Information Software (FMIS) and digital technologies such as Bayer's Climate FieldView, present great opportunities for improving the accuracy and effective application climate-smart technologies to reduce the carbon intensity of farming practices. In recognition of this rapid transition occurring within the agricultural industry to adopt practices that assist farmer manage and solve climate change impacts, the regulatory framework to implement the clean fuel production credit under Section 45Z must incentivize farmers to make the investments necessary to implement best practices in climate-smart agricultural.

II. Utilization of farm-specific calculators, such as the FD-CIC adds further granularity to the GREET Model and enables Treasury and the taxpayer to determine the “emission rates,” and thus the tax value, more accurately.

Bayer believes that to incentivize and promote effectively the acceleration of the transition to cleaner, climate-smart agricultural practices, the regulatory framework must account for the constant evolution of technology and sustainable agricultural practices. Agriculture products make up the majority of the feedstock for fuels that qualify clean fuel production credits under 45Z, including for sustainable aviation fuel. Section 45Z provided tremendous incentives to reduce the carbon intensity of the agriculture sector as a whole, which has been estimated to contribute 11.2 percent of the total U.S. GHG footprint according to the U.S. Nationally Determined Contribution under the Paris Agreement. Effectively applied, 45Z has the potential to effectuate significant and quantifiable U.S. greenhouse gas emission reductions through the use of advanced data gathering technology and analytics, technologies deployed in the field for clean fuel feedstock production and otherwise captured through the best available modeling.

As such, for purposes of clean energy federal income tax credits, Treasury and DOE should remain flexible and ensure the GREET model integrates additional verified methods of data collection, such as the inclusion of existing calculators like FD-CIC, which is designed to improve the results generated by GREET with practice and technology specific data at the farm level. Use of this model better accounts for actual emissions rates. FD-CIC is a more transparent method of data collection due to its farm-level calculation and its feedstock-specific application. It allows for the farm-level quantification of feedstock-specific carbon intensity, leading to more accurate data and climate-smart management practices. FD-CIC allows the user to define their inputs and incorporates GHG emission intensities of these inputs from the GREET model, ensuring that the resulting data from GREET is more thorough and accurate. In addition, the technologies to gather the data to support existing calculators like FD-CIC are commercially available in the United States and internationally, now.

The 45Z credit ultimately available to a taxpayer is tied to the Section 45Z(b)(1)(B) “emissions rates” of such fuel. As prescribed in the IRA, Treasury will publish annually GHG fuel emission

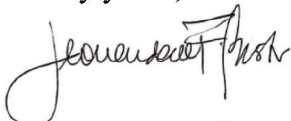
rate tables for similar types and categories of transportation fuels. In Section 45Z(b)(1)(B)(i), Congress directs Treasury to populate these tables based on the lifecycle GHG emissions as provided for in Section 211(o)(H) of the Clean Air Act (the Life Cycle Analysis definition under the Renewable Fuels Standards (RFS) program implemented by EPA). Nonetheless, when determining the emissions rate for sustainable aviation fuel, Congress provides Treasury with the option to select between either (1) the methodology included in the Carbon Offsetting and Reduction Scheme prescribed by International Civil Aviation Organization, an agency of the United Nations, or (2) a methodology similar to and satisfying Section 211(o)(H) of the Clean Air Act. In order to effectuate the legislative mandate of proliferating the domestic development of clean-energy technologies and practices, we respectfully recommend that Treasury defer to utilizing the targeted U.S.-led methodologies consistent with Section 211(o)(H) of the Clean Air Act over those prescribed by a branch of an international intergovernmental agency. Such approach is also consistent with the default methodology (Section 211(o)(H) of the Clean Air Act) prescribed in Section 45Z(b)(1)(B)(i). In implementing the lifecycle analysis for GHG emissions under the RFS, EPA relies on the GREET model, with the ability to petition for consideration of site specific lifecycle determinations, consistent with the approach Congress set out in the IRA.

III. Cooperation among Treasury and the private sector will drive innovation, lead to job creation, and spur the advancement of sustainable farming practices.

Public-private cooperation on use of data and technology that are driving innovation in sustainable farming practices and clean fuel production will advance the Biden-Harris Administration's goals of U.S. climate leadership and high-level job creation to support the energy transition. We recommend that the regulatory processes governing the implementation of Section 45Z allow the private sector to support the Treasury Department and the Department of Energy in their data collection and analytics. Lastly, Bayer urges Treasury and IRS to issue guidance with expediency; in order to unleash the full potential of section 45Z, decisions need to be made in the near term rather than the date the credit becomes effective.

We greatly appreciate Treasury's consideration of Bayer's comments and welcome the opportunity to meet with the appropriate representatives at Treasury to share further ideas around the use of best data and modeling practices in supporting the clean fuel production crediting process. Should these suggestions be followed, private sector actors such as Bayer can make data collection more accurate, and in turn, assist American farms and farmers and our environment. Bayer will continue to give thought to the implementation of Section 45Z and update Treasury, as appropriate, with further materials to supplement our recommendations in this letter.

Sincerely yours,



Leonardo Bastos
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