Airlines for America®

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Submitted via www.regulations.gov

Holly Porter
Associate Chief Counsel
Passthroughs & Special Industries
Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-58)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, D.C. 20044

Re: Airlines for America® Comments in Response to Notice 2022-58, Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production

Dear Ms. Porter:

Airlines for America® (A4A) and its members[1] appreciate the opportunity to comment on Notice 2022-58 issued by the Department of Treasury and the Internal Revenue Service (collectively referred to as "Treasury") on November 3, 2022 ("Notice"). In addition to our detailed comments below, we also endorse the comments of the SAF BTC Coalition, of which A4A was a founding member.

A4A and its members strongly supported and applauded the passage – with crucial support from the Biden Administration – of tax credits supporting the production of sustainable aviation fuel ("SAF") enacted as part of the Inflation Reduction Act of 2022 ("IRA"). Specifically, IRA § 13203 added the SAF-specific Blenders Tax Credit to the Internal Revenue Code ("Code") under § 40B ("SAF-BTC" or "§ 40B Credit") and IRA § 13704 added the Clean Fuel Production Credit under § 45Z ("CFPC" or "§ 45Z credit").

[1] A4A is the principal trade and service organization of the U.S. airline industry. A4A's members are: Alaska Airlines, Inc.; American Airlines Group Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corp.; Hawaiian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member, but we have not consulted Air Canada on this letter, and these comments are limited to U.S. stakeholders.

As explained in more detail below, A4A and the Biden Administration share the goal of achieving exponential growth in the production of SAF so that 3 billion gallons of cost-competitive SAF becomes available to U.S. aircraft operators by 2030, the achievement of which – through its SAF Grand Challenge – the Administration has adopted as a matter of policy.[2] Accordingly, Treasury should act as expeditiously as possible to provide guidance needed to facilitate implementation of tax provisions intended to spur SAF production, including the SAF-BTC and CFPC.

A4A is thus pleased to provide these comments to help inform development of guidance implementing the CFPC and another provision that can help support production of SAF, the Clean Hydrogen Production Credit (added pursuant to IRA § 13204 under § 45V of the Code (the "Clean Hydrogen Credit" or "§ 45V credit"). However, we are very concerned that, although the SAF-BTC takes effect in less than a month (on January 1, 2023), the Notice does not seek input on implementation of the SAF-BTC and Treasury has not yet issued a notice seeking such input.

Implementation of the SAF-BTC should be an immediate priority. Accordingly, in addition to issuing guidance on implementation of the CFPC, we urge Treasury to act as soon as possible to issue guidance on implementation of the SAF-BTC. In this connection, we highlight here that many provisions of the SAF-BTC and the CFPC are substantially identical and – as such – many of the comments on implementation of the CFPC provided in direct response to this Notice are directly applicable to the SAF-BTC and can be used to develop guidance on its implementation. Underscoring the urgency of the matter, we also provide comments that address other issues relevant to implementation of the SAF-BTC that are not directly responsive to this Notice.

BACKGROUND

A4A and our members are committed to limiting and further reducing our industry's greenhouse gas ("GHG") emissions. On March 30, 2021, A4A, together with our member carriers, pledged to work across the aviation industry and with government leaders in a positive partnership to achieve net-zero carbon emissions by 2050 ("2050 NZC Goal").[3] This pledge continues our longstanding commitment to embrace our responsibility to address climate change and reduce commercial aviation's GHG emissions footprint.[4] Our 2050 NZC Goal parallels the Administration's goal of achieving

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[2] *See* The White House, *FACT SHEET: Biden Administration Advances the Future of Sustainable Fuels in American Aviation (Sept. 9, 2021)* (available here) ("SAF Fact Sheet"); Office of Energy Efficiency & Renewable Energy, *Sustainable Aviation Fuel Grand Challenge* (available here; A4A, *U.S. Airlines Announce 3-Billion-Gallon Sustainable Aviation Fuel Production Goal* (Sept. 9, 2021) (available here).

[3] *See* A4A, *Major U.S. Airlines Commit to Net-Zero Carbon Emissions by 2050* (March 30, 2021) (available here). On October 4, 2021, the International Air Transport Association ("IATA") and its member airlines followed suit by also committing to achieve net-zero carbon emissions by 2050. *See* IATA, *Net-Zero Carbon Emissions by 2050* (Oct. 4, 2021) (available here).

[4] Since 2009, A4A and our members have been active participants in a global aviation coalition. Prior to strengthening our commitment in 2021, we had committed to 1.5 percent annual average fuel efficiency improvements through 2020, with goals to achieve carbon-neutral growth beginning in 2020 and a 50 percent net reduction in CO_2 emissions in 2050, relative to 2005 levels.

net-zero GHG emissions in the aviation sector by 2050, included in its Aviation Climate Action Plan announced November 9, 2021 ("Aviation CAP").[5]

With consistent analyses showing that production of SAF must grow exponentially through 2030 and continue rapid growth through 2050 for the industry to meet its climate goals,[6] A4A carriers also pledged to work with the government and other stakeholders toward a rapid expansion of the production and deployment of commercially viable SAF to make 2 billion gallons available to U.S. aircraft operators in 2030. On September 9, 2021, in harmony with the federal government's announcement of the SAF Grand Challenge, A4A and our members increased the A4A SAF goal by an additional 50 percent, calling for 3 billion gallons of cost-competitive SAF to be available to U.S. aircraft operators in 2030.

Prior to the onset of the COVID-19 pandemic, commercial aviation helped drive over 10 million U.S. jobs and over five percent of U.S. Gross Domestic Product. U.S. airlines and the Administration recognize that the broader goal of decarbonizing the entire U.S. economy while ensuring that it continues to grow and thrive cannot be achieved unless the aviation sector can be decarbonized while ensuring the sector remains a critical engine of prosperity and progress. As reflected by our mutual goals, airlines and the Administration recognize that this cannot be achieved absent exponential growth in SAF production through 2030. As the Administration summarized in its Aviation CAP: "Sustainable Aviation Fuels will be critical to the long-term decarbonization of aviation. Through a range of policy instruments, including the SAF Grand Challenge, the USG will work with industry to rapidly scale up SAF production with the goal of meeting the fuel needs of U.S. aviation by 2050."[7]

Accordingly, A4A and our members strongly supported tax incentives – in particular the SAF-BTC – needed to catalyze SAF production. The Biden Administration also strongly advocated for the enactment of these incentives[8] and we are thankful for the critical support the Administration provided to ensure enactment of the SAF-BTC and CFPC (and other tax incentives like the Clean Hydrogen Credit) that will provide support vital to successfully engendering exponential growth in domestic SAF production through 2030. The SAF tax credits are intended to send a strong signal to investors to provide the capital needed to catalyze this exponential growth. Issuing guidance on implementation of the tax credits will provide certainty to investors, ensuring the credits are maximally effective. We urge Treasury to act as expeditiously as possible to progress the Administration's SAF policy. It is with the intent of fully supporting Treasury in this effort that we provide these comments.

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[5] The Aviation CAP is available here.

[6] *See, e.g.,* Air Transport Action Group, *Waypoint 2050* (available here).

[7] Aviation CAP at 18.

[8] *See* SAF Fact Sheet; Aviation CAP at 23 ("Well-designed economic incentives, including blender's tax credits and investment tax credits, can help bridge the cost gap between SAF and petroleum jet fuel. That is why President Biden proposed a Sustainable Aviation Fuel tax credit as part of the Build Back Better Agenda.").

COMMENTS

1. Establishment of Emissions Rate for Sustainable Aviation Fuel: Treasury Must Identify DOE's GREET Model as a Methodology for Evaluating SAF Lifecycle GHG Emissions Under IRA § 45Z and § 40B

Section 3.02(2) of the Notice asks "[w]hat methodologies should the Treasury Department consider for the lifecycle greenhouse gas emissions of sustainable aviation fuel for the purposes of § 45Z(b)(1)(B)(iii)(II)?" As an initial matter, the language in § 45Z and § 40B that defines how the lifecycle GHG emissions reductions for SAF is to be determined is essentially identical. Both sections provide that the lifecycle GHG emissions is to be determined/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 [ICAO] with the agreement of the United States, ***or***"[9]

- "any similar methodology which 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 this section.[10]

Given this identical language, we urge Treasury to make it clear that any guidance on implementation of § 45Z(b)(1)(B)(iii) is equally applicable to implementation of § 40B(e).

Treasury has a critical responsibility to ensure the best available science is used to calculate lifecycle GHG emissions of SAF. The United States has led the world in developing biofuels and SAF and science-based evaluation of the lifecycle analysis ("LCA") of such fuels. U.S. academics and government scientists have worked together for decades to develop the U.S. Department of Energy's Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies ("GREET") model, which is widely recognized as the "gold standard" for evaluating energy emissions and impacts and has been described as "exactly the right tool" to facilitate the evaluation of SAF emissions.[11] In this context, we emphasize that IRA § 45Z and § 40B preclude Treasury from relying exclusively on SAF GHG emissions values determined under CORSIA, requiring the identification of methodologies other than CORSIA. Congress certainly intended to ensure that a state-of-the-art, world-leading methodology developed by U.S. government

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[9] *See* § 45Z(b)(1)(B)(iii)(I) and § 40B(e)(1) (emphasis added). CORSIA allows for the use of actual, facility-specific lifecycle emissions value in lieu of an applicable "default" value. *See* ICAO, *CORSIA Methodology for Calculating Actual Life Cycle Emissions Values*, at 4 (June 2022), available here). Treasury guidance should thus make clear that taxpayers are not bound by the existing CORSIA default lifecycle emissions values and – in addition to using other approved methodologies – may avail themselves of an evaluation of actual, facility-specific lifecycle emissions conducted under CORSIA.

[10] *See* § 45Z(b)(1)(B)(iii)(II) and § 40B(e)(2).

[11] *See GREET the Dawn of a New Day in Sustainable Aviation Fuels* (Nov. 4, 2021) (available here) ("Since its debut, GREET has emerged as the gold standard for life cycle analysis of a wide range of vehicle technologies and energy systems. . . . Argonne's GREET model is exactly the right tool to help the aviation industry rise to the new [SAF] challenge").

and academic researchers through an executive agency of the U.S. government could and would be used to implement these U.S. tax incentives.

GREET certainly meets the statutory requirements of § 45Z and § 40B. GREET is manifestly a "similar methodology" to CORSIA; indeed, CORSIA largely relies on GREET.[12] The default LCA values developed under CORSIA "are calculated as the sum of the 'core LCA' values (adding up direct emissions along the supply chains of individual SAFs) and the estimated 'ILUC' [Indirect Land Use Change] emission values."[13] The CORSIA core LCA values are "defined using a process-based attributional LCA approach, accounting for mass and energy flows, along the whole fuel supply chain,"[14] and CORSIA explicitly adopts GREET as a methodology for this purpose.[15] CORSIA uses two different economic models to estimate ILUC emissions, including the "GTAP-BIO" model which "is a computable general equilibrium model developed at the Center for Global Trade Analysis Project (GTAP) at Purdue University."[16] GREET also incorporates a module that evaluates emissions related to land use change, the Carbon Calculator for Land Use Change from Biofuels Production ("CCLUB") which also relies on GTAP-BIO to calculate emissions associated with land use change.[17]

Similarly, GREET satisfies the criteria under section 211(o)(1)(H) of the Clean Air Act (42 U.S.C. 7545(o)(1)(H)), which defines "lifecycle greenhouse gas emissions" for purposes of the Renewable Fuels Standard ("RFS") under the Clean Air Act. The definition requires the RFS to consider the "aggregate quantity of [GHG] emissions" including "direct emissions and significant indirect emissions" for the "full fuel life cycle." As discussed above, GREET evaluates both "core" and "ILUC" emissions to establish the GHG reductions resulting from the use of biofuels, including SAF. EPA also included

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[12] *Id.* ("Notably, [ICAO] is using GREET to develop a global market-based scheme to limit international aviation CO_2 equivalent (CO_{2e}) greenhouse gas emissions: the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). . . . Wang and Uisung Lee of Argonne, together with researchers from several other organizations, have used GREET to develop carbon intensities of more than 30 SAF production pathways so far for the CORSIA.")

[13] *See CORSIA: The first internationally adopted approach to calculate life-cycle GHG emissions for aviation fuels* (in Renewable and Sustainable Energy Reviews (October 2021)) (available here).

[14] *Id.,* citing *ICAO. CORSIA eligible fuels – life cycle assessment methodology 2020.*

[15] *See CORSIA SUPPORTING DOCUMENT – CORSIA Eligible Fuels – Life Cycle Assessment Methodology* (June 2019) (available here).

[16] *CORSIA: The first internationally adopted approach to calculate life-cycle GHG emissions for aviation fuels.*

[17] *See* Presentation of Michael Wang, Argonne National Laboratory, *Biofuel Life-Cycle Analysis with the GREET Model* (March 1, 2022) (available here); *see also CCLUB Users' Manual and Technical Documentation* (*Rev. 6* available here) at p. 1 (" . . . CCLUB has been developed as an integral part of Argonne National Laboratory's . . . GREET model . . . to analyze greenhouse gas (GHG) emissions from land use change (LUC) and land management change (LMC) in the context of overall biofuel life-cycle analysis (LCA). . . . In response to [biofuel production] scenarios, Global Trade Analysis Project (GTAP), a computable general equilibrium economic model, estimates the conterminous United States (or domestic) and international area of land that transits from one of four land use types (i.e., forest, grassland, cropland pasture, and feedstock lands) to another at the agro-ecological zone (AEZ) level (Section 2)."

GREET (and other models) when it expanded the RFS in 2010[18] and GREET is integral to the methodology it continues to use today to analyze lifecycle GHG emissions of biofuels under 211(o)(1)(H) of the Clean Air Act.[19] We note also that another IRA provision, § 45V(c)(1), also defines "lifecycle greenhouse gas emissions" by referring to 211(o)(1)(H) of the Clean Air Act and requires the use of GREET to evaluate those emissions.

In sum, Treasury must explicitly affirm that GREET as a standalone methodology including its embedded land use change models is "similar to" CORSIA and identify it for use to calculate the lifecycle GHG emissions under § 45Z(b)(1)(B)(iii)(II) and § 40B(e)(2). We also urge Treasury to adopt the methodology EPA uses in its administration of the RFS program and to exercise the broad discretion granted under § 45Z and § 40B to identify other methodologies for evaluating SAF GHG emissions.[20]

2. Special Rules: Treasury Should Exercise the Broad Discretion Granted Under IRA § 45Z and § 40B to Facilitate the Certification of SAF

IRA § 45Z and § 40B both provide that a taxpayer will not be allowed the applicable tax credit unless the taxpayer provides a certification from a third party demonstrating the fuel meets certain requirements. The SAF credits cannot serve their intended purpose of supporting the exponential growth in SAF production necessary to achieve the Administration's SAF Grand Challenge unless SAF can be certified. Accordingly, we urge Treasury to support this important Administration priority by exercising its discretion broadly to facilitate SAF certification.

The structure for meeting this certification requirement parallels the life cycle GHG methodology provisions discussed immediately above and, as with those provisions, the provisions for certifying SAF under § 45Z and § 40B are substantively identical.[21] In short, § 45Z and § 40B require a certification that demonstrates compliance with CORSIA's "general requirements, supply chain requirements and information transmission requirements" or "similar requirements" established under non-CORSIA schemes.

For SAF producers choosing to use CORSIA as the methodology for evaluating the GHG emissions of their fuel, Treasury must accept any third-party certification scheme approved by ICAO.[22] As noted above, IRA § 45Z and § 40B compel Treasury to identify

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[18] *See* 74 Fed. Reg. 24,904 at 24,916 (May 26, 2009).

[19] 87 Fed. Reg. 22823, 22827 (The "methodology . . . developed to estimate 'lifecycle greenhouse gas emissions' as defined at section 211(o)(1)(H) of the Clean Air Act" . . . "includes estimating GHG emissions associated with fuel production, distribution and use based on data from GREET" and involves the "application of coefficients and assumptions from the [GREET] model.")

[20] In contrast to other IRA provisions, Congress did not explicitly require the use of GREET to evaluate SAF GHG emissions under § 45Z and § 45B, thus granting Treasury broader discretion to identify methodologies, in addition to GREET, that meet the criteria set out in these sections.

[21] *See* § 45Z(f)(1)(A)(i)(II) and § 45B(f)(2).

[22] *See CORSIA Approved Sustainability Certification Schemes* (available here). At present, this means Treasury must accept both the Roundtable of Sustainable Biomaterials (RSB) and the International Sustainability and Carbon Certification (ISCC) certification schemes for demonstrating compliance with CORSIA.

methodologies other than CORSIA (including GREET) to evaluate SAF GHG emissions. Treasury should exercise its discretion broadly to recognize a variety of third-party schemes to certify fuels where SAF producers have opted to use a methodology other than CORSIA to evaluate GHG emissions, including third parties: approved under CORSIA,[23] with an EPA-approved Quality Assurance Program under the RFS, or that are a Verification Body accredited under the California Low Carbon Fuel Standard.[24]

3. Other Issues

As noted above, in addition to the items discussed in detail above, we join the comments of the SAF BTC Coalition.

Conclusion

Thank you for your consideration. Please let us know if you have any questions regarding our comments.

Sincerely yours,

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[23] In this circumstance the third party would use the "general requirements, supply chain requirements and information transmission requirements" to certify a non-CORSIA GHG emissions value for the fuel.

[24] More information on LCFS Verification, including a list of accredited verification bodies is available here).