

Client Alert

Energy

MAY 09, 2024

For more information,
contact:

John Clay Taylor
+44 20 7551 7553
jtaylor@kslaw.com

Suyoung Moon (Sue)
+1 202 626 453
smoon@kslaw.com

Amina S. Dammann
+1 512 457 2002
adammann@kslaw.com

Ilana Saltzbar
+1 202 626 3745
isaltzbar@kslaw.com

King & Spalding

Washington, D.C.
1700 Pennsylvania Avenue,
NW
Suite 900
Washington, D.C. 20006
Tel. +1 202 737 0500

London
125 Old Broad Street
London, EC2N 1AR
United Kingdom
Tel. +44 20 7551 7500

Treasury and IRS Issue Additional Guidance on Section 40B Sustainable Aviation Fuel Tax Credit

Section 40B of the Internal Revenue Code of 1986 (the “Code”) enacted by the Inflation Reduction Act of 2022 (the “IRA”) provides tax credits for each gallon of sustainable aviation fuel (“SAF”) sold or used by a taxpayer before January 1, 2025 (the “SAF Credit”).ⁱ

On April 30, 2024, the U.S. Department of Treasury (“Treasury”) and Internal Revenue Service (“IRS”) released Notice 2024-37 (the “Notice”). The Notice provides guidance on a new methodology for calculating the lifecycle greenhouse gas emissions reduction percentage and establishes safe harbors for calculating and certifying the emissions reduction percentage.ⁱⁱ The Notice follows prior guidance (Notice 2023-6 and Notice 2024-6), summarized in the following [King & Spalding Client Alert](#).

BACKGROUND

In order to qualify for the SAF Credit, the SAF must, among a number of requirements, have a lifecycle greenhouse gas (“GHG”) emissions reduction percentage of at least 50 percent relative to the petroleum-based jet fuel GHG emissions of 89 g CO₂e/MJⁱⁱⁱ, calculated using (i) the Carbon Offsetting and Reduction Scheme for International Aviation (“CORSIA”) that has been adopted by the International Civil Aviation Organization with the agreement of the United States or (ii) “any similar methodology” that satisfies the criteria under § 211(o)(1)(H) of the Clean Air Act (as in effect on August 16, 2022).

In prior guidance, the Treasury and IRS determined that the existing Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (“GREET”) model developed by Argonne National Laboratory does not satisfy the requirements under Section 40B and provided safe harbors for using the Environmental Protection Agency’s



(the “EPA”) Renewable Fuel Standard (RFS) program to calculate the emissions reduction percentage and meet the certification requirements under Section 40B. The Treasury and IRS had announced at that time that a modified version of the GREET model that satisfies the Section 40B requirements will be available in early 2024 (the “40BSAF-GREET 2024 model”).

THE 40BSAF-GREET 2024 MODEL SAFE HARBOR

The April 30, 2024 Notice provides a safe harbor for using the 40BSAF-GREET 2024 model to calculate the emissions reduction percentage for the SAF Credit.^{iv} The IRS will accept an emissions reduction percentage of the SAF synthetic blending component in the qualified SAF mixture that is calculated in accordance with the 40BSAF-GREET 2024 model, provided the certification requirements under Section 40B are satisfied.^v The 40BSAF-GREET 2024 model is available at <https://www.energy.gov/media/322677>.

The 40BSAF-GREET 2024 model calculates lifecycle GHG emissions associated with SAF from two production pathways: (i) hydroprocessed esters and fatty acids (“HEFA production pathway”) and (ii) alcohol-to-jet using an ethanol feedstock (“ATJ-Ethanol production pathway”). The HEFA production pathway corresponds to the ASTM-approved HEFA production pathway: HEFA-SPK, ASTM D7566, Annex A2 (approved in 2011 at a 50 percent blend limit with petroleum-derived jet fuel). The ATJ-Ethanol production pathway corresponds to the ASTM-approved alcohol-to-jet fuel pathway: ATJ-SPK, ASTM D7566, Annex A5 (approved in 2016 at a 30 percent blend limit).

The 40BSAF-GREET 2024 model requires users to enter foreground data specific to their facility in order to generate a GHG intensity. For all pathways, feedstock and energy inputs to the SAF production facility are required foreground data. Users must also enter the transportation modes and distances for the finished SAF required to transport the fuel to its point of use. Users are not supplied with optional default values for any foreground data to ensure that lifecycle GHG intensities accurately reflect operations of individual facilities. The user manual for further information on eligible SAF pathways, including the full set of foreground data for each production pathway, is available at <https://www.energy.gov/media/322899>.

SAFE HARBOR FOR USDA CSA PILOT PROGRAM

The Notice establishes a safe harbor for using Climate Smart Agriculture (“CSA”) crops cultivated pursuant to the U.S. Department of Agriculture (“USDA”) CSA Pilot Program as feedstocks for SAF synthetic blending component.^{vi} In lieu of a full lifecycle analysis, a SAF synthetic blending component produced from CSA corn or CSA soybean is eligible for an additional proxy reduction (“CSA reduction”) in the calculation of the emissions reduction percentage.

The emissions reduction percentage (rounding down to the nearest whole percent) is calculated for the SAF Credit by multiplying a fraction, the numerator of which is the baseline for the lifecycle GHG emissions of petroleum-based jet fuel of 89 gCO₂e/MJ (LC) minus the lifecycle emissions value (LSf), and the denominator of which is the baseline (LC), by 100 percent ($[(LC - LSf) / LC] \times 100\% = \text{emissions reduction percentage}$). The CSA reduction for CSA corn is an additional 10 gCO₂e/MJ reduction in the LSf. The CSA reduction for CSA soybean is an additional 5 gCO₂e/MJ reduction in the LSf. The emissions reduction percentage formula accounting for CSA reduction is $[LC - (LSF - \text{CSA reduction})] / LC \times 100\%$.^{vii}

For the ATJ-Ethanol production pathway using CSA corn, the USDA CSA Pilot Program requires that CSA farmers who qualify under the USDA CSA Pilot Program and grow the CSA corn engage in three CSA practices on the entire acreage on which CSA crop is grown: no-till farming, planting cover crops, and applying enhanced efficiency nitrogen fertilizer. For the HEFA production pathway using SCA soybean, the USDA CSA Pilot Program requires that CSA farmers



qualifying under the USDA CSA Pilot Program engage in two practices on the entire acreage on which CSA crop is grown: no-till farming and planting cover crops. Appendix A to the Notice explains these practice requirements in greater detail.

CERTIFICATION SAFE HARBOR UNDER THE CARB LCFS PROGRAM

The producer or importer of the SAF synthetic blending component must be registered with the IRS in order to qualify for the SAF Credit. Section 40B requires registered producers or importers of the SAF synthetic blending component to provide certification from an unrelated party demonstrating compliance with the requirements under Section 40B.

The Notice provides that the IRS will consider a registered producer or importer of a SAF synthetic blending component as having met the certification requirements of Section 40B if such registered SAF producer or importer obtains the requisite certification from a CARB LCFS verifier and such certification is provided in a format that is substantially similar to an LCFS Verification Statement (the “CARB certification”).

The registered SAF producer or importer must record the CARB LCFS Verifier Executive Order number of the CARB LCFS verifier who provides the requisite certification on the Certificate for SAF Synthetic Blending Component Using the 40BSAF-GREET 2024 Model in substantially the same form as the model certificate in Appendix C to the Notice. The registered SAF producer or importer must also provide a copy of the 40BSAF-GREET 2024 model Excel workbook used to calculate the emissions reduction percentage to the LCFS verifier. The LCFS verifier must certify the foreground data of the Excel workbook and other requirements as provided in the 40BSAF-GREET 2024 User Manual in accordance with CARB LCFS verifier practices and standards.

CERTIFICATION SAFE HARBOR APPLICABLE TO THE USDA CSA PILOT PROGRAM

The Notice separately provides a safe harbor for certifying the Section 40B requirements for purposes of the USDA CSA Pilot Program by using an unrelated party certifier (a “CSA certifier”) that meets the USDA CSA Pilot Program requirements for Eligible Unrelated Party Certification Bodies.^{viii} To qualify for the CSA reduction, registered SAF producers or importers using the ATJ-Ethanol or HEFA production pathways must obtain unrelated party certification of compliance with the USDA CSA Pilot Program (the “CSA certification”) in addition to the CARB certification discussed above. A CSA certifier must audit records and supply chain records to verify compliance with the USDA CSA Pilot Program and also complete a mass balance to verify traceability of the contracted quantity of CSA crops to the registered SAF producer or importer.

Registered SAF producers or importers who want to use the CSA reduction for producing SAF from CSA crops must take the following steps:

- (1) contract directly with USDA CSA Pilot Program farmers for CSA corn or CSA soybean in accordance with the requirements of the USDA CSA Pilot Program described in Appendix A of the Notice;
- (2) collect and maintain from the USDA CSA Pilot Program farmer a Certificate for Climate Smart Agriculture Crops (in substantially the same form as the model certificate in Appendix B to the Notice) with respect to each CSA crop;
- (3) maintain all records described in the Practice Recordkeeping Requirements and Supply Chain Traceability Requirements and Recordkeeping sections of the description of the USDA CSA Pilot Program in Appendix A;
- (4) make all such records available to the CSA certifier; and



(5) maintain and make available for IRS inspection the CSA certification and the Certificate for Climate Smart Agriculture Crops.

In addition, registered SAF producers or importers must submit the Certificate for SAF Synthetic Blending Component Using the 40BSAF-GREET 2024 Model and the USDA CSA Pilot Program for Corn and Soybean in substantially the same form as the model certificate in Appendix D to the Notice with their claim.

King & Spalding has significant expertise counseling clients on all facets of EPA's RFS program, including representing clients in regulatory counseling and transactional interfaces related to sustainable aviation fuel, as well as in enforcement investigations initiated by EPA, defending clients in enforcement actions before EPA and the Department of Justice, and representing clients in litigation on challenges to EPA's RFS program. King & Spalding also has one of the deepest energy teams among the AmLaw top tier firms, and that team is directly focused on green and low-carbon hydrogen and their derivatives and carriers. Our energy team is fully integrated across jurisdictions, with our tax lawyers regularly providing advice on "first of its kind," cutting-edge transactions throughout the emerging new energy value chain.

ABOUT KING & SPALDING

Celebrating more than 130 years of service, King & Spalding is an international law firm that represents a broad array of clients, including half of the Fortune Global 100, with 1,300 lawyers in 24 offices in the United States, Europe, the Middle East and Asia. The firm has handled matters in over 160 countries on six continents and is consistently recognized for the results it obtains, uncompromising commitment to quality, and dedication to understanding the business and culture of its clients.

This alert provides a general summary of recent legal developments. It is not intended to be and should not be relied upon as legal advice. In some jurisdictions, this may be considered "Attorney Advertising." View our [Privacy Notice](#).

ABU DHABI	CHARLOTTE	DUBAI	LONDON	NORTHERN VIRGINIA	SILICON VALLEY
ATLANTA	CHICAGO	FRANKFURT	LOS ANGELES	PARIS	SINGAPORE
AUSTIN	DALLAS	GENEVA	MIAMI	RIYADH	TOKYO
BRUSSELS	DENVER	HOUSTON	NEW YORK	SAN FRANCISCO	WASHINGTON, D.C.



ⁱ The IRA also added Section 6426(k) which provides a credit for sustainable aviation fuel and cross-references Section 40B.

ⁱⁱ The Notice primarily addresses the SAF credit requirements applicable to a qualified mixture produced under ASTM International (ASTM) D7566. The Notice notes that the Treasury and IRS, in consultation with the Department of Transportation and the Federal Aviation Administration, understand that no jet fuel is currently produced in the United States under ASTM D1655 Annex A1 that would qualify for the SAF Credit.

ⁱⁱⁱ Until further notice, for purposes of calculating the emissions reduction percentage, the IRS will treat the lifecycle GHG emissions of petroleum-based jet fuel as equal to 89 grams of carbon dioxide equivalent per megajoule of energy or 89 g CO₂e/MJ as the baseline.

^{iv} See Notice 2024-37, Section 3.01(3).

^v The EPA has concluded that the 40BSAF-GREET 2024 model addresses the issues it previously identified that made the existing GREET model insufficient for calculating lifecycle GHG emissions for purposes of § 211(o)(1)(H) of the Clean Air Act. The Notice states the 40BSAF-GREET 2024 model is a “similar methodology” to the CORSIA methodology as both evaluate the full fuel lifecycle, including all stages of fuel and feedstock production through to the end use of the finished fuel.

^{vi} See Notice 2024-37, Section 4.01(2). The USDA determined that using CSA crops as feedstocks for SAF synthetic blending components results in estimated GHG reduction and carbon sequestration benefits and incorporated CSA practices into the USDA CSA Pilot Program.

^{vii} The Notice provides the following example: A registered SAF producer produces a SAF synthetic blending component via the ATJ-Ethanol production pathway using 100% CSA corn. Using the 40BSAF-GREET 2024 model, the SAF synthetic blending component produced via the ATJ-Ethanol production pathway has a calculated LSf of 51.8 gCO₂e/MJ. This LSf can be reduced by the CSA reduction of 10 gCO₂e/MJ. To calculate the emissions reduction percentage (rounding down to the nearest whole percent): $[(89 \text{ gCO}_2\text{e/MJ} - (51.8 \text{ gCO}_2\text{e/MJ} - 10 \text{ gCO}_2\text{e/MJ})) / 89 \text{ gCO}_2\text{e/MJ}] \times 100\% = 53.03\%$, rounded down to 53%.

^{viii} Generally, the CSA certifier must be accredited by the ANSI National Accreditation Board (ANAB) for ISO 14065 and demonstrate agricultural expertise. In the United States, the ANAB Accreditation Program for Greenhouse Gas Validation and Verification Bodies operates according to ISO 14065.