



April 6, 2026

The Honorable Scott Bessent
Secretary
U.S. Department of Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

Internal Revenue Service
CC:PA:01:PR (REG-121244-23)
Room 5503, P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Docket ID No. IRS-REG-121244-23

Submitted via Federal Portal: www.regulations.gov

RE: Section 45Z Clean Fuel Production Credit; Notice of Proposed Rulemaking and Public Hearing

Dear Secretary Bessent:

On behalf of the members of the American Coalition for Ethanol (ACE), I appreciate the opportunity to respond to requests for comment on the notice of proposed rulemaking from the United States Treasury and Internal Revenue Service (IRS) regarding the 45Z Clean Fuel Production Credit, which applies to eligible transportation fuel produced domestically after December 31, 2024, that is sold by December 31, 2029. Separate from these comments, we are also submitting an outline for the testimony that ACE consultant Jonathon Lehman will deliver during the May 28 public hearing.

ACE is a grassroots advocacy organization, powered by rural Americans who have built an innovative U.S.-based industry that delivers homegrown and low-carbon biofuel and food both domestically and for a growing world. Our members include U.S. ethanol biorefineries, investors in biofuel facilities, farmers, and companies that supply goods and services to the U.S. ethanol industry.

The 45Z credit, originally enacted by Congress through the Inflation Reduction Act, is a technology-neutral incentive to encourage investments in clean fuel production. Congress made several improvements to 45Z in the One Big Beautiful Bill, such as allowing transferability of the credit, excluding unsubstantiated indirect land use change (ILUC) penalties from emissions rate calculations, prioritizing fuels made from feedstocks grown in the U.S., Mexico, or Canada, and extending the term of the credit through 2029.

The proposed regulations issued by the Treasury and IRS in February 2026 begin to clarify certain questions regarding how the credit will work. In particular, the rule addresses concerns we and others had previously expressed about the definition of “qualifying sale” by replacing it with a new and clarified “qualified sale” definition. Nevertheless, additional clarity is needed, specifically on how ethanol producers can monetize low-carbon farming practices through 45Z.

Ethanol producers and farmers have significant capital at stake. U.S. corn farmers continue to experience painfully high input costs and low market prices. Most corn farmers are forecast to suffer their fourth consecutive year of net profit losses in 2026.

Since farming practices represent about half of ethanol’s carbon intensity, clean fuel producers must have the opportunity to monetize low-carbon farming practices such as reduced tillage or precision fertilizer use to fully unlock the value of 45Z. If Treasury allows low-carbon farming practices to qualify towards emissions rates it could mean billions of dollars annually for clean fuel producers and farmers, providing a market-based opportunity to dramatically increase rural and farm income.

We support inclusion of the U.S. Department of Agriculture’s (USDA’s) Feedstock Carbon Intensity Calculator (FD-CIC) in the final rule to allow farmers and ethanol companies to benefit from reductions in carbon intensity related to farming practices. Further, we are encouraged Treasury expects to update the 45ZCF FD-CIC with new data from real-world activities such as the USDA Regional Conservation Partnership Program (RCPP) activity being led by ACE and specifically designed to address information gaps regarding the low-carbon benefits of farming practices to help improve the accuracy of modeling tools. We are hopeful the FD-CIC and 45ZCF-GREET model are updated periodically to reflect the data we provide.

Treasury and the IRS should move swiftly to finalize clear guidance, and work closely with the USDA and the Department of Energy (DOE) to develop and finalize the tools necessary to achieve full monetization of farming practices, such as FD-CIC and DOE’s 45ZCF-GREET model.

Below are ACE’s specific comments on topics addressed in the rulemaking.

45ZCF-GREET, Low-Carbon Farming Practices, and ACE Activity to Generate Real-World Data

We strongly support the use of the 45ZCF-GREET model for emissions rates and support that the phrase “most recent determinations under the Greenhouse gases, Regulated Emissions, and Energy use in Technologies (formerly Transportation) model” means determinations under the latest version of the 45ZCF-GREET. Further, we strongly support the Treasury’s designation of the latest version of 45ZCF-GREET as the successor model. What remains imperative is for Treasury to routinely incorporate updates to the latest version of the 45ZCF-GREET model to ensure use of the most up-to-date science for the 45Z credit.

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In January 2025, USDA’s Office of Chief Economist (OCE) issued an interim final rule “Technical Guidelines for Crops Used as Biofuel Feedstocks” alongside a beta version of USDA’s Feedstock Carbon Intensity Calculator (FD-CIC). These USDA tools help establish procedures for quantifying, reporting, and verifying the carbon intensity of biofuel feedstock crops, though we will offer additional thoughts on verification using existing USDA agencies later in our comments.

Further, the Treasury and IRS proposed rulemaking indicates “*following publication of the final version of USDA’s FD-CIC, the Treasury Department and IRS anticipate that a section 45Z-specific*

version of the Feedstock Carbon Intensity Calculator (FD-CIC) module will be included as an input to the DOE's 45ZCF-GREET model (45ZCF-FD-CIC) used for calculating the carbon intensity adjustments under 45Z for feedstocks that are produced using certain agricultural practices. Such practices may include no-till, reduced till, cover crops, and nutrient management. 45ZCF-FD-CIC may undergo periodic updates, including incorporation of new data and methodologies from other FD-CIC versions (for example, USDA FD-CIC, R&D GREET FD-CIC) to incorporate more recent data or new data sources, types of practices, feedstock types, or changes to geographic specificity. The results of the 45ZCF-FD-CIC are expected to inform the emissions rates calculated under the 45ZCF-GREET model. The Treasury Department anticipate that 45ZCF-FD-CIC may be used for fuel produced and sold in 2025 even though the 45ZCF-FD-CIC will likely be published in 2026."

We have strongly recommended updates to FD-CIC values for low-carbon farming practices by incorporating the best available science and results from real-world activities, so we are encouraged Treasury expects to make these updates as part of future iterations of the 45ZCF-GREET. An example of real-world evidence is the USDA-Natural Resource Conservation Service (NRCS) Regional Conservation Partnership Program (RCP) activity being led by ACE to specifically address how the low-carbon benefits of farming practices are undervalued in various geographies in existing models including USDA's FD-CIC.¹ More specific information regarding this activity we are leading can be found in Attachment A. ACE stands ready to cooperate with Treasury, USDA, and DOE so that the real-world data generated from our activity can be used to make updates and improvements to the modeling tools for 45Z.

Based on our understanding of the status of these FD-CIC and GREET modeling tools, in order for low-carbon farming practices to be included in 45Z, a few steps are still required. First, USDA must finalize its rulemaking and FD-CIC model. We have been in contact with USDA on this critical action and believe the Agency is making it a priority. Second, DOE must incorporate the USDA FD-CIC as a module into the 45ZCF-GREET model. It is our understanding the scientists who work in DOE's Argonne National Lab on the GREET model continue to make progress on this tool, including the removal of the unsubstantiated indirect land use change (ILUC) penalty starting in 2026. However, it is our understanding that certain DOE officials are reluctant to include USDA's FD-CIC into the final 45ZCF-GREET model. This reluctance is unwarranted, would cost rural communities billions annually, and should not be allowed to stall the significant progress scientists at DOE and USDA have made to calculate the value of low-carbon farming practices. DOE must incorporate the FD-CIC into the final 45ZCF-GREET and be willing to allow for periodic updates. Finally, Treasury must finalize the 45Z rulemaking to include the FD-CIC tools and guidelines to quantify, report, and verify low-carbon farming practices.

We implore Treasury and the IRS to act swiftly to finalize clear guidance, and work closely with USDA and DOE to develop and finalize the tools necessary to achieve full monetization of farming practices.

¹ <https://ethanol.org/usda-rcpp>

Rely on Existing USDA Agencies for Verification and Recordkeeping for Low-Carbon Farming Practices

It is critical for Treasury to minimize administrative burdens on taxpayers and farmers for verification and recordkeeping of low-carbon farming practices and not “reinvent the wheel” or create duplicative government red tape when existing USDA agencies are already verifying and keeping records with respect to farming practices. We strongly encourage Treasury to work with USDA to rely on their existing record keeping and verification protocols for the final 45Z rulemaking.

We encourage this because USDA has a long track record of responsibly stewarding federal taxpayer funds for commodity and conservation programs, ensuring that participating farmers meet necessary requirements to receive those federal funds.

Since 1985, USDA has been required to ensure that farmers meet specific conservation requirements on their lands to be eligible for federal farm programs administered by USDA’s Farm Service Agency (FSA), Risk Management Agency (RMA) and NRCS. Known as “conservation compliance,” Congress wanted to ensure that federal farm programs did not entice farmers to grow crops on highly erodible lands or convert wetlands for agricultural production.

Farmers who fail to abide by these rules are ineligible for federal farm programs including FSA loans and disaster assistance payments, NRCS and FSA conservation benefits, and federal crop insurance support provided by the RMA. Under federal regulation, farmers and affiliated persons must affirmatively attest (form AD-1026) that they will not plant or produce an agricultural commodity on highly erodible land without following an NRCS approved conservation plan or system, plant or produce an agricultural commodity on a converted wetland, or convert a wetland which makes the production of an agricultural commodity possible. Additionally, activities that may affect compliance such as removing fence rows, combining fields, or conducting drainage activities must be pre-approved by USDA to ensure compliance.

USDA’s FSA and NRCS are tasked with ensuring eligibility. Leveraging thousands of staff in state and county offices, NRCS is responsible for making technical determinations of compliance at the farm level and thousands of FSA state and county office staff use this information to make eligibility determinations for the covered programs. In 2020, USDA ensured the eligibility of 1,095,270 recipients of Farm Bill commodity program payments totaling \$34.01 billion in federal dollars. The same year, USDA ensured the eligibility for 2,185,728 crop insurance policies with payouts of \$6.3 billion. From 2017 to 2023, USDA’s NRCS provided \$12.9 billion in conservation payments to U.S. farmers for the voluntary adoption of conservation practices working on average with over 325,000 farmers annually.

One of the largest conservation programs NRCS administers is the Environmental Quality Incentives Program (EQIP), which provides money and technical help to farmers to plan and implement many of the same conservation practices, namely cover crops, reduced-tillage, no-till and nutrient management, which are outlined as eligible under USDA’s technical guidelines for biofuel feedstocks and FD-CIC. Under EQIP, NRCS has developed extensive national practice standards for each approved conservation practice that are then further refined into state-specific practice standards to meet state and local requirements which may be more restrictive than the national criteria.

For example, the national practice standard for what is required of farmers adopting cover crops under EQIP runs seven pages long and includes considerations for wind and water erosion, soil moisture, soil compaction, nutrient use, soil organic matter content, among others. In each state, farmers must meet state-based specifications for seeding rate, seeding date, cover crop varieties, planting and termination methods to meet the environmental outcome. Each of these requirements is evidenced by seed tags, receipts or visual inspection as part of the USDA reimbursement process.

Farmers understand and accept USDA's system, which is why it should be leveraged for 45Z implementation instead of re-inventing the wheel with a new, expensive, and unreliable system. From 2017 to 2022, NRCS distributed over \$5 billion in EQIP incentives in 205 different practice areas. NRCS has specific, state-based environmental standards farmers must meet when implementing the practice. NRCS, or its partners, are responsible for documenting that farmers have complied with the standards yearly, prior to USDA authorizing taxpayer funded conservation payments to participating farmers. This is the same level of documentation and verification that would need to occur under 45Z.

If these existing USDA protocols are sufficient for verifying the distribution of billions of taxpayer dollars for crop insurance, commodity, and conservation programs, they are equally sufficient for verifying the same conservation practices for the 45Z credit. The Treasury Department should rely on existing USDA assets in the reporting and verification for the 45Z tax credit, and we encourage USDA to directly engage Treasury with respect to its expertise and experience in this area.

In terms of chain of custody, while USDA's interim rule recommends a mass balance approach, the department notes many stakeholders prefer a book-and-claim system. ACE has members who support both of these approaches and we note other commodity groups have members who are encouraging consideration of both book-and-claim and mass balance.

Flexibility for Energy Attribute Certificates (EACs)/Renewable Energy Credits (RECs)

Taxpayers must be able to use energy attribute credits (EACs) and renewable energy credits (RECs) to reduce emissions rates under 45Z. Currently Treasury is proposing a 3-year or 36-month lookback period tied to EACs/RECs application towards qualifying transportation fuel production under 45Z.

We recommend Treasury take a flexible and practical approach to EACs. We further recommend Treasury consider allowing utilities to source EACs from their wholesale power supplier, even if that supplier crosses into two separate market regions. Because power suppliers can serve multiple regions, this flexibility would still preserve the ability to source EACs from local entities or wholesale providers. Local distribution cooperatives pay for a portion of the EACs produced by its power supplier, so they should be able to sell those EACs to offset power supply at an ethanol plant they locally serve.

Changes to Emissions Rate Table and Provisional Emissions Rate (PER) Process

The statute requires Treasury to annually publish an emissions rate table for types of transportation fuels and the proposed rulemaking generally requires taxpayers to use the latest emissions rate table. The table does not provide for emissions rates per se. Instead, that information must be

calculated using the 45ZCF-GREET or other appropriate model. But the table does indicate which types of fuels, feedstocks, and production pathways qualify for the 45Z credit.

We believe Treasury must be willing to adjust the emissions rate table to incorporate existing types of fuels and pathways. Specifically, corn kernel fiber (CKF) ethanol production pathways have been adopted by many ACE-member facilities. CKF ought to be included in the next table published by Treasury. We acknowledge Treasury could, in the alternative, ensure that CKF is included as part of the PER process. However, we are concerned with the red tape and time associated with seeking a pathway under this PER process and would prefer that CKF is an eligible fuel pathway in a future emissions rate table.

In addition to a more efficient and streamlined PER process, ACE would also encourage Treasury to recognize that the 45ZCF-GREET currently requires all ethanol producers to use the exact same operational values for certain inputs (enzymes, yeast, etc.) and transportation distances (transporting corn from fields to farms and/or ethanol facilities, moving ethanol from facilities to end users, etc.), so enabling taxpayers to request a PER based on unique inputs and transportation distances ought to be considered in the final rule.

Rounding of Emissions Factors Should be More Granular

The calculation of the 45Z emissions factor plays a pivotal role in determining whether a clean fuel producer qualifies for the credit and the value of that credit, and some concerns have been raised about the statutory limitation that the emissions factor must be rounded to nearest multiple of 0.1.

Specifically, a taxpayer must round the emissions factor up if the digit in the hundredths place is 5 or greater, and round down if the digit in the hundredths place is less than 5.

ACE encourages Treasury to examine potential flexibilities to finalize a more granular approach to rounding of the emissions factor, such as the nearest multiple of 0.01 or 0.001. Virtually every investment an ethanol producer makes to become more efficient also results in lower carbon intensity. A more precise approach to rounding would support investment in the critically important incremental technology innovations within facilities.

Thank you for your time and consideration of these comments.

Sincerely,



Brian Jennings, CEO
American Coalition for Ethanol