RENEWABLE FUELS ASSOCIATION

Attention: IRS-2025-0002 (Notice 2025-10)

Internal Revenue Service
CC:PA:01:PR (Notice 2025-10)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Submitted Electronically via regulations.gov

Re: IRS-2025-0002, Section 45Z Clean Fuel Production Credit; Request for Public Comments (Notice 2025-10)

Dear Secretary Bessent,

The Renewable Fuels Association (RFA) appreciates the opportunity to provide these comments to the U.S. Treasury Department and Internal Revenue Service (IRS) on the notice of intent to propose regulations on Section 45Z Clean Fuel Production Credit and Request for Public Comments (Notice 2025-10; January 10, 2025).

RFA is the leading trade association for America's ethanol industry. Its mission is to advance the development, production, and use of fuel ethanol and co-products by strengthening America's renewable fuels industry and raising awareness about the benefits of renewable energy. Founded in 1981, RFA serves as the premier meeting ground for industry leaders and supporters. RFA's 300-plus members are working to help America become cleaner, safer, more energy secure, and economically vibrant.

If properly implemented, the 45Z tax credit has the potential to advance U.S. energy security, prioritize domestic energy resources, strengthen rural economies, and create a transformative incentive for the adoption of new technologies in the renewable fuels and agriculture sectors. The technology-neutral intent of 45Z represents the most economically efficient and environmentally responsible approach to boosting U.S. energy production. However, for the 45Z program to truly drive innovation and value creation in the marketplace,

Treasury must move expeditiously to propose, finalize, and promulgate implementing regulations. Clean fuel producers, including RFA's members, are in desperate need of clarity, certainty, and stability in the regulatory framework supporting the 45Z tax credit.

RFA believes the final 45Z regulations must recognize the realities of today's biorefining and agriculture sectors and the complexities of our nation's transportation fuels marketplace. At the same time, final regulations must maintain an intuitive and manageable approach to registration, reporting, and recordkeeping that creates the kind of dependable value that empowers businesses to invest.

As detailed in these comments, RFA believes several key provisions and definitions outlined in the notice need clarification, while other proposed provisions need more extensive modifications to better facilitate technology innovation and more accurately reflect the realities of today's marketplace. In addition, our comments raise several concerns and questions about some elements of the underlying statutory structure of 45Z, and we encourage Treasury to work with Congress to address these.

Finally, clean fuel producers will not act on this notice (or any subsequent guidance or regulations) unless they have the assurance that the 45Z credit will be durable, stable, and reliably available in the future. We appreciate Treasury's ongoing efforts to provide that assurance and look forward to continuing our dialog with the Department on the timely and efficient implementation of 45Z.

The first section of our comments responds to the Treasury notice's "General request for comments," while the second section responds to the "Specific request for comments" on two distinct issues.

I. RESPONSE TO GENERAL REQUEST FOR COMMENTS

RFA offers the following comments on the forthcoming proposed regulations described in Section 3 of the Treasury notice, the topics identified in Section 4.02 of the notice, and the draft text in the Appendix of the notice.

1. Treasury should clarify the definition of "Qualifying Sale."

The notice's proposed definition of "qualifying sale" at 1.45Z-1(b)(25)(ii) is causing unnecessary confusion in the marketplace and could cause significant disruptions if it is finalized without clarifying modifications. The definition in the notice departs from the statutory definition of "sale" at I.R.C. §45Z(a)(4) by including language specifying that "sold for use in a trade or business means sold for use ***as a fuel*** in a trade or business…" (emphasis

added). Based on the examples provided in the notice, it appears Treasury may have added the terms "as a fuel" in an attempt to prevent scenarios in which one party produces a 45Z-eligible clean fuel and sells it to a buyer who then uses it as a feedstock to create another qualifying fuel that could also claim a 45Z credit. While we understand this intent and agree with the need to prevent "double counting," we believe this risk is already ameliorated by the definition of "qualifying facility," taxpayer registration requirements, and other provisions. We are concerned that the way the 1.45Z-1(b)(25)(ii) provision is currently written could lead to significant unintended consequences that contradict both the statutory language of I.R.C. §45Z(a)(4)(B) and Congressional intent.

In the ethanol industry, it is standard practice for producers to sell their fuel to wholesalers, marketers, traders, and distributors ("resellers") who then facilitate its distribution to end users across the country. These intermediary parties do not consume or "use" the fuel in their trade or business. The overwhelming majority of fuel ethanol produced and used in the United States today is sold to marketers and distributors who then transfer the ethanol to fuel blenders and retailers downstream. It is common for the title to a given quantity of ethanol to change hands multiple times before the ethanol is ultimately blended with gasoline and consumed. If the proposed regulation were interpreted to deny 45Z eligibility simply because a reseller is involved in the transaction, the impact on producers and the industry as a whole would be extremely severe.

The current wording of the notice's definition of "qualifying sale" at 1.45Z-1(b)(25)(ii) could be misconstrued to mean that I.R.C. §45Z(a)(4)(B) applies only when the buyer *directly consumes the fuel*. Such a narrow reading would effectively disqualify producers from securing 45Z credits when selling their clean fuel to resellers, even though these transactions are fundamental to the industry's supply chain. A restrictive interpretation of this nature would severely limit the amount of transportation fuel eligible for the 45Z credit, directly contradicting both the statutory language of I.R.C. §45Z(a)(4)(B) and the broader legislative goal of promoting clean fuel production and reducing emissions.

To align with industry realities and Congressional intent, we strongly urge Treasury to modify the definition at 1.45Z-1(b)(25)(ii) to explicitly clarify that producers remain eligible for 45Z credits when selling transportation fuel to marketers, traders, blenders, and other intermediaries who, in turn, resell the fuel to other parties who ultimately use the fuel. We believe there are several ways Treasury could concisely clarify this while still addressing Treasury's concern regarding potential scenarios in which two parties attempt to claim 45Z credit for the same fuel.

Alternatively, Treasury could include language clarifying that any qualifying sale or transaction of transportation fuel under the Renewable Fuel Standard (42 U.S.C. §7545(o)) meets the requirements of a qualifying sale for the purposes of 45Z.

2. Provisions regarding an "Unrelated Person" and "Member of a Consolidated Group" would benefit from additional clarification.

Another concept within the qualifying sale requirement that would benefit from additional clarification is 1.45Z-1(b)(25)(iii) ("Sale by another member of a consolidated group") and the requirement that the sale be to an "unrelated person." As with the "qualifying sale" provisions, it appears these proposed requirements were written by Treasury with the intent of preventing 45Z tax credits from being generated by two parties on the same volume of fuel. However, the risk of "double counting" is already ameliorated by Treasury's definition of "qualifying facility" and other provisions detailing what party in the fuel supply chain may generate 45Z.

It is not unusual for an ethanol production company to have an ownership interest in a separate and unrelated renewable fuel distribution/marketing company. Partial ownership of a marketing entity by an ethanol producer has no impact on the fuel's movement through the marketplace and is a well-established business practice. While 1.45Z-1(b)(33) appears to strongly imply that the renewable fuel distribution/marketing company would be considered an "unrelated person" to the ethanol production company (i.e., because the two companies would not be treated as a single employer under §52(b) of the Code), we encourage Treasury to more explicitly clarify in the upcoming proposed rule that a renewable fuel marketing/distribution company is an "unrelated person" to a renewable fuel production company, even if the renewable fuel production company maintains a partnership with, or has some ownership interest in, the marketing/distribution company.

Treasury Notices 2008-60 (sale of electricity produced from certain renewable resources under I.R.C. §45) and 2023-24 (credit for production of electricity from advanced nuclear power facilities under I.R.C. §45J) are instructive in this regard. Provisions in those notices clearly treat the sale of electricity from a partnership to its partner as a qualifying sale to an unrelated person.

3. Treasury should further clarify the applicability of safe harbor provisions.

The notice's provisions at 1.45Z-4(e)(2) ("Safe harbor for substantiation of emissions rate") are somewhat ambiguous and are creating confusion amongst taxpayers who will likely be eligible to claim the 45Z tax credit. These provisions would benefit from additional clarification by Treasury. The proposed provision states that a taxpayer may substantiate the

emissions rate for a non-SAF transportation fuel that was determined using the 45ZCF-GREET model "by obtaining certification with respect to such fuel substantially in the form and manner described in 1.45Z-5 for certifying a SAF transportation fuel." Some market participants are interpreting this provision to mean that safe harbor for substantiation of emissions rates is *currently* available as long as certification consistent with the requirements of 1.45Z-5 is provided.

However, both 1.45Z-4(f) and 1.45Z-5(i) of the notice state that "this section" (i.e., the sections outlining safe harbor and certification requirements) applies to qualifying sales occurring "*on or after* the date proposed regulations are published in the Federal Register" (emphasis added). Because proposed 45Z regulations have not yet been published in the Federal Register, other market participants are under the impression that safe harbor for substantiation of emissions rates does not yet apply. This interpretation is further supported by Treasury's statement in the notice that "*forthcoming proposed regulations* would provide an emissions rate substantiation safe harbor…" (emphasis added).

Accordingly, we seek further clarification on whether the safe harbor provision for substantiating emissions rates currently applies or will not be applicable until a proposed rule is published in the Federal Register. In addition, we seek clarification on the specific protections the proposed safe harbor provision offers to taxpayers. Traditionally, safe harbors protect against penalties; but in this case, since compliance is achieved through verification of the lifecycle analysis conducted using the 45ZCF-GREET model, we believe there should also be protection against potential calculation errors in the emissions rate when verification has been completed for non-SAF fuels.

Clearly defining the scope and applicability of the safe harbor is essential for ensuring compliance and giving taxpayers greater confidence in claiming the 45Z credit. We urge Treasury to confirm that once verification is completed under this provision, taxpayers are safeguarded from penalties or disallowance due to inadvertent errors in the CI score calculation.

4. Treasury's approach to rounding of emissions factors should be reconsidered.

While we understand that the statute at I.R.C. §45Z(b)(2) establishes that the emissions factor determined under I.R.C. §45Z(b)(1)(A) must be rounded to the nearest multiple of 0.1, this rounding convention results in a severely stratified tax credit regime (i.e., $0.10 per gallon increments assuming PWA requirements are satisfied) that may have unintended consequences.

For example, an ethanol producer whose emissions rate is under 50 kilograms of CO2-equivalent per million BTUs (kgCO2e/mmBTU) but above 47.4 kgCO2e/mmBTU would not qualify for the 45Z credit. This appears inconsistent with the statutory intent of 45Z and Treasury's proposed definition of "Low-GHG ethanol" at 1.45Z-1(b)(20)(ii)(E). An ethanol producer with an emissions rate of 47.4 kgCO2e/mmBTU would generate $0.10 per gallon (assuming PWA requirements are met), while an ethanol producer whose emissions rate is 47.5 kgCO2e/mmBTU would not be eligible for any credit value at all. Thus, in this example, the 0.1 kgCO2e/mmBTU difference in lifecycle emissions (a 0.2% variance) could mean the difference between $12 million and $0 in annual 45Z tax credit value for a typical 120-million-gallon per year facility.

Large "step-downs" in credit values based on miniscule differences in emissions rates could create distinct winners and losers in the marketplace despite there being only slight variances in actual real-world emissions impacts. We urge Treasury to closely examine its statutory authorities to determine whether it can adopt alternative rounding methods that result in a fairer, more graduated approach to 45Z credit values. RFA believes rounding emissions factors to the nearest multiple of 0.01 rather than the nearest multiple of 0.1 would better accomplish the goals of the 45Z program.

45Z is intended to spur innovation and encourage investment in new technologies. While some technologies may result in dramatic changes in emissions rates, others will be more incremental. These smaller steps should be incentivized as well with a more precise and graduated set of credit values (e.g., using $0.01 or $0.02 per gallon increments). Additionally, the risk that normal variations in yield, energy use, or other operational factors could leave a fuel producer's emissions rate just below the threshold needed for a $0.10 per gallon credit. Being left with nothing would discourage investment in many scenarios.

In addition, we seek clarity from Treasury on whether fuels with negative emissions factors are eligible for 45Z credit values in excess of $1 per gallon (assuming PWA requirements are satisfied). I.R.C. §45Z(b)(1)(C)(ii) of the statute appears to contemplate negative emissions rates, but Treasury's notice does not provide any further information regarding the treatment of fuels with negative emissions rates. Allowing credit values to exceed $1 per gallon for fuels with emissions rates below -2.5 kgCO2e/mmBTU would stimulate greater investment and innovation in carbon-negative transportation fuels. Treasury should clearly explain how credit values are to be calculated for fuels with negative emissions rates.

5. **Treasury should formally integrate climate-smart agriculture (CSA) practices into the 45Z program.**

The notice states that IRS "intend[s] to propose rule at a future date" that will allow taxpayers to "utiliz[e] certain climate smart agriculture practices" to generate "additional reductions in calculating the lifecycle greenhouse gas emissions rates" of qualifying fuels. We support inclusion of CSA practices in the methodology used for calculating lifecycle GHG emissions rates (i.e., 45ZCF-GREET). In its upcoming proposed rule, we recommend that Treasury integrate the USDA FD-CIC module and related technical guidelines from USDA into the 45Z regulatory framework and lifecycle GHG emissions methodology. While we believe additional improvements and refinements to USDA FD-CIC may be needed in the future, the current model provides a good starting point for incorporating CSA practices into calculations of lifecycle emissions rates.

We also believe that Treasury should ensure that farmers and biofuel producers are allowed to use a book-and-claim approach to supply chain management for CSA practices. Book-and-claim is a chain-of-custody model in which the administrative record flow does not necessarily connect to the physical flow of material or product throughout the supply chain. Thus, the GHG reductions related to the CSA practices can be "decoupled" from the physical feedstock and transferred separately from the farmer/grain supplier to the low carbon fuel producer (i.e., the entity registered with IRS under 45Z) via a dedicated instrument (perhaps a "CSA certificate"). In such a system, the buyer (fuel producer) and seller (CSA farmer or CSA grain supplier) need not be connected via a physical supply chain.

As a result, the buyer owns the GHG reduction benefits of the CSA feedstock without physically possessing the specific feedstock at their biorefinery. Still, it is the buyer's purchase of the CSA-related GHG reductions that incentivizes the farmer's adoption of CSA practices. Adopting a book-and-claim system for CSA would allow farmers who are not in close physical proximity to ethanol, SAF, or other biofuel facilities to be rewarded for adopting CSA practices. It would also allow the grain market to continue operating rationally and efficiently. Book-and-claim also would allow the ethanol, SAF, or other biofuel producer to manage geographic risk (i.e., in the event that an adverse weather event or drought near their facility made them unable to obtain CSA feedstock) and deliver on low-carbon fuel volume commitments.

If Treasury were to require that physical commodities grown using CSA practices be rigidly tracked through the supply chain and delivered to biofuel production facilities, this could cause significant distortions in grain flows and pricing. As a result, program participation and the associated GHG emissions benefits would be limited unnecessarily. Even certain mass-balancing approaches for tracking CSA feedstock (like those adopted for the CSA pilot program under the 40B SAF tax credit) could result in market distortions and

unnecessary economic burdens that would likely deter farmers from pursuing the adoption of CSA and deter biofuel producers from sourcing CSA feedstock.

6. **Treasury should expeditiously implement the Provisional Emissions Rate (PER) process and allow a more flexible approach.**

Although the statute and the notice both call for the establishment of a Provisional Emissions Rate (PER) process for producers using a pathway not covered by emissions rate tables or 45ZCF-GREET, the details of this process have not yet been determined. While we are encouraged by the inclusion of a PER process and the determination that such pathways will be deemed eligible as of January 1, 2025 (upon approval), RFA stresses that a functioning PER process will be critical to the overall success of 45Z.

According to the notice, an ethanol producer may not request a PER if their pathway or primary feedstock is established in the applicable emissions rate table, "even if the applicant disagrees with the underlying assumptions (that is, background data) or calculation approach used by the most recent 45ZCF-GREET model." We urge Treasury to reconsider this decision.

While the 45ZCF-GREET model allows individual producers to use unique, facility-specific inputs for important production factors (e.g., natural gas usage, electricity, ethanol yield per bushel), producers are not allowed to use facility-specific inputs for other important factors that influence lifecycle GHG emissions rates. For example, 45ZCF-GREET essentially assumes all ethanol producers use the exact same enzyme, yeast, and chemical inputs, and achieve the same co-product yields. It also assumes all facilities have identical transportation distances and modes (and, thus, transportation emissions) for feedstock delivered to the biorefinery and ethanol delivered to the marketplace. These factors (and others) are treated as "background data" in 45ZCF-GREET; according to the Treasury notice, producers would be unable to request a PER based on the actual conditions of their production process. In reality, these factors vary from facility to facility and can have meaningful impacts on the overall lifecycle GHG emissions rate.

Similarly, the 45ZCF-GREET model treats all corn feedstock the same, assuming identical yield per acre, fertilization rates, on-farm energy use, and other key factors. In the real world, practices and production efficiency vary from farm to farm, resulting in important differences in lifecycle GHG emissions rates. Under the Treasury's proposed PER approach, producers who source feedstock produced using higher-efficiency, lower-carbon practices are unable to incorporate those GHG benefits into their emissions rate calculation. This underscores the importance of integrating CSA practices (i.e., USDA's guidelines and FD-CIC) into the upcoming proposed rule and committing to make further improvements to the

treatment of feedstock production factors in the lifecycle emissions rate calculation methodology. However, in the longer term, we believe future iterations of 45ZCF-GREET should be modified to include user inputs for factors like co-product yields, transportation distances and modes, and other important operational variable.

7. **Fuel pathways based on imported UCO feedstock should be excluded until suitable substantiation and recordkeeping requirements are developed.**

We support the exclusion of pathways for fuels derived from imported used cooking oil (UCO) from 45ZCF-GREET until Treasury has identified appropriate feedstock substantiation and recordkeeping requirements. We encourage Treasury to take the time necessary to establish transparent, science-based, peer-reviewed requirements for substantiating the integrity of UCO feedstock. We also urge Treasury to develop rigorous supply chain tracking requirements for imported UCO to ensure the integrity of the feedstock is maintained from its point of origin to its point of consumption.

8. **Ethanol should be the baseline for determining "gallon equivalent" for non-liquid fuels.**

As stated in the notice, the statute "directs taxpayers to use a gallon equivalent for non-liquid fuels but does not provide a baseline standard." Treasury proposes to use gasoline as the basis for determining "gallon equivalent" for non-liquid fuels "because gasoline is the most common transportation fuel." We believe the proper baseline for determining "gallon equivalent" for non-liquid fuels is denatured fuel ethanol (low heat value), not gasoline. First, ethanol is the baseline used by the U.S. Environmental Protection Agency for determining gallon equivalency and RIN credit generation for renewable fuels (including gaseous fuels) under the Renewable Fuel Standard. Using ethanol as the baseline for 45Z would streamline and simplify accounting and compliance (and reduce the risk of errors) for producers who are subject to both the RFS and 45Z program. Second, non-liquid clean fuels should be placed on a level playing field with other 45Z-eligible clean fuels for the purposes of tax credit generation.

9. **Treasury should consider quarterly measurement periods for emissions rate determinations for transportation fuels eligible for 45Z.**

While it is not specified in the notice, it is assumed that the "measurement period" (i.e., the period over which 45ZCF-GREET input values, such as natural gas and electricity use, should be averaged) for determining emissions rates is the calendar tax year (January 1 to December 31).

We believe Treasury should consider allowing taxpayers to use measurement periods (also sometimes referred to as the "averaging periods") for emissions rate determinations that are shorter in duration, perhaps quarterly. This would help clean fuel producers better account for season-to-season changes in operational factors that can significantly impact the emissions rate assigned to the fuel. It would also allow for more precision in both emissions rate calculations and

The following hypothetical example demonstrates the impacts of choosing the proper measurement period. An ethanol production company determines (using the 45ZCF-GREET model) that its emissions rates for the four quarters of a given calendar year are as follows:

	Emissions Rate (kgCO2e/mmBTU)	**Production (million gallons)**
Q1	**46.1**	29
Q2	**45.5**	32
Q3	**49.9**	33
Q4	**50.7**	26
Annual	**48.0**	**120**

For the first two quarters, the producer's emissions rate would generate a 45Z tax credit worth $0.10 per gallon (assuming PWA requirements are satisfied), for a total value of $6.1 million. For the last two quarters, the producer's emissions rate is above the threshold needed to claim the 45Z credit and no credit value would be generated (e.g., possible reasons for the higher emissions rates in Q3 and Q4 could be equipment problems, process bottlenecks, changes in feedstock quality, or other unforeseen operational factors). If the measurement period for determining the emissions rate is the full 12-month calendar year, this producer would have an average emissions rate of 48.0 kgCO2/mmBTU, resulting in *no credit value generation at all*. If, on the other hand, the measurement period was quarterly, the producer would generate $6.1 million in credit value for ethanol produced in the first two quarters of the year and $0 in credit value for the ethanol produced in the last two quarters. In this scenario, the revenue generated during the first two quarters would help incentivize continued innovation at the facility, support American jobs, and promote U.S. energy resources.

To account for seasonal and operational variability and its effect on emissions rates, other regulatory and tax programs to which renewable fuel producers are subject (such as the California Low Carbon Fuel Standard) allow for measurement periods that are shorter than one year in duration (typically quarterly). In fact, the 40B Sustainable Aviation Fuel tax credit administered by IRS used a quarterly measurement period and allowed taxpayers to

claim the SAF excise tax credit quarterly (Notice 2023-06). We encourage Treasury to consider the benefits of a shorter measurement period for the purposes of determining emissions rates and examine how other existing regulatory and tax programs have approached this issue.

10. Treasury should modify Prevailing Wage and Apprenticeship (PWA) requirements.

While the IRS has already finalized prevailing wage and apprenticeship (PWA) requirements for the increased credit amount for 45Z in a separate action (89 Fed. Reg. 53,184), we strongly urge the Treasury Department to revisit and modify the PWA requirements. At best, the current requirements for prevailing wage serve as an unnecessary burden and deterrent to clean fuel producers who might otherwise make investments to continually reduce their emissions rates. At worst, the prevailing wage requirements are simply unachievable for many clean fuel producers based on factors outside of their control (location/geography of their facilities, lack of PWA-qualifying workers, etc.).

While 1.45Z-3 of the Income Tax Regulations for applicable PWA requirements contains some direction for taxpayers intending to claim 45Z and a helpful exemption for existing facilities from some apprenticeship requirements, the adoption of PWA by ethanol production facilities will still require considerable adaptation and expense. Though the PWA requirements for enhanced credit values are clear in statute and would require Congressional action to remove, Treasury should be cognizant of the business realities of a largely rural, maturing industry with established contractor relationships and specialized skilled trades.

The 5x multiplier for credit values for PWA-compliant facilities provides considerable motivation for fuel producers to integrate PWA, but this transition represents a considerable learning curve and burdensome expense—both for fuel producers and the labor sector. Furthermore, ethanol producers will face uncertainty during this learning curve if there are no assurances that inadvertent errors or omissions will not jeopardize their ability to claim the enhanced credit value. Ethanol producers, as well as the consultants, accountants, and attorneys who work for them, are often unfamiliar with PWA practices such as nuances in job classifications, obtaining prevailing wage determinations, and the application of "construction, alteration, or repair" to the work conducted at production facilities. These issues will be exacerbated by the lack of union trades and other contractors familiar with PWA practices located in the rural or isolated areas where ethanol production facilities are often located.

Given these challenges, RFA urges the Treasury to implement safe harbors, good faith exemptions, or other mechanisms that provide fuel producers with certainty that their PWA compliance efforts will withstand scrutiny or audit. Having clearer methods to ensure that their actions will create a presumption of compliance will encourage further investment and reduce the risk of losing 80 percent of their credit value. Additionally, opportunities to cure any inadvertent errors in complying with PWA requirements should be simple to obtain absent a showing of bad faith.

Relatedly, all ethanol production facilities house equipment that is involved in the production of products other than fuel. Treasury should set a bright line establishing that only equipment used in the fuel production process should be subject to "construction, alteration, or repair" PWA rules. For example, Treasury should clarify that equipment used to process or dry distillers grains animal feed, produce corn distillers oil, store grain, process additional coproducts, or house offices should not be subject to the PWA requirement for enhanced credit values.

11. The short duration of 45Z, and Treasury's delay in promulgating rules, is discouraging innovation and investment and undermines the objectives of the program.

Congress established an effective date of January 1, 2025, and a termination date of December 31, 2027, for the 45Z tax credit (I.R.C. §45Z(g)), thus creating a three-year window of eligibility for the credit. However, Treasury has not yet published proposed regulations to implement 45Z in the Federal Register and it seems unlikely that a final rule could be published and promulgated any sooner than late 2025. Thus, the three-year window intended by Congress is already closing and taxpayers do not yet have the clarity and certainty needed to make decisions about how best to position themselves to claim the 45Z tax credit. For many renewable fuel producers, investment plans and strategies for reducing emissions rates remain on hold pending further action by Treasury to clarify the path forward for 45Z. In many cases, the new equipment, technologies, and process aids needed to further reduce emissions rates can require 12-18 months or longer to design, permit, order, and install at a biorefinery.

Given Treasury's lengthy delay in proposing, finalizing, and promulgating 45Z regulations, we are encouraging policymakers to consider extending the duration of the 45Z tax credit. While we understand the term of applicability for 45Z is established in statute and would require Congressional action to change, we encourage Treasury to work with the committees of jurisdiction in Congress to examine options for extending the duration of the 45Z program to better facilitate accomplishment of its objectives. We believe policymakers

should also consider taking a "placed in service" approach to the term of eligibility for 45Z, similar to the approach taken for the 45Q.

12. The proposed structure for 45Z creates an unintended disincentive for the production of alcohol-to-jet (ATJ) sustainable aviation fuel (SAF).

One of Congress' main objectives with the 45Z tax credit was to create incentives for the commercialization and expanded production of all forms of clean transportation fuels, including for aviation. Unfortunately, the structure of the 45Z credit as described in the notice would strongly disincentive the use of ethanol to make SAF via the alcohol-to-jet (ATJ) process.

Specifically, the transition from the 40B SAF credit to 45Z has significantly lowered the value of the credit for SAF, *especially SAF produced from the ATJ process*. This results from the fact that under the current structure, an ethanol producer would receive a considerably higher 45Z tax credit value when the ethanol is used as a ground transportation fuel component than the SAF producer would receive if the same ethanol is instead used to produce SAF.[1]

The solution to this problem is to include a minimum ("floor") value for SAF under 45Z that puts it on a level playing field with ethanol used in ground transportation. Under the now-expired 40B program, SAF had a floor value of $1.25 per gallon (assuming PWA requirements are met). While 45Z maintains the $1.75-per-gallon maximum ("ceiling") value for SAF that was included in 40B, the current 45Z program drops the floor for SAF to $0. RFA believes a floor credit value for SAF should be included in 45Z as well.

RFA fully understands that the floor and ceiling values for SAF under 45Z are set by statute and would require Congressional action to change. However, we believe Treasury and IRS have an important role in working with the committees of jurisdiction in Congress to explain the need for such statutory changes.

13. Treasury should streamline excise tax registration.

An ongoing concern with the adoption of any new tax credit program is the excise tax registration process. RFA urges IRS to streamline or eliminate the excise tax registration process for 45Z. Ethanol producers who acted quickly to begin the registration process are

[1] This occurs for two primary reasons: 1) the process of converting ethanol into SAF adds emissions to the overall lifecycle, thus resulting in a 45Z tax credit value for SAF that is lower than the 45Z tax credit value for the original ethanol, and 2) 1.67 gallons of ethanol are used to produce 1 gallon of SAF. Because 45Z tax credit values are awarded per volumetric gallon of liquid fuel, 1.67 gallons of ethanol used for ground transportation fuel would generate more 45Z credit value than 1 gallon of ethanol-based SAF used for aviation.

experiencing lengthy registration bottlenecks with excise tax registration, which is not designed for such a credit that already includes its own verification systems. Eliminating or modifying the excise tax registration process to remove substantial compliance requirements will be necessary with the increase in registrations for 45Z.

II. RESPONSE TO SPECIFIC REQUEST FOR COMMENTS

RFA offers the following comments in response to Treasury's specific request for comments on two distinct issues.

1. **Response to: (1) How the fuel pathways approved under the EPA's Renewable Fuel Standard (RFS) program could be adapted for purposes of the emissions rate table if the Treasury Department and the EPA were to determine that the RFS program is a methodology "similar" to CORSIA that also satisfies the criteria under § 211(o)(1)(H) of the CAA (as required by § 45Z(b)(1)(B)(iii)(II)).**

For most ethanol production pathways, 45ZCF-GREET offers a far more current and thorough understanding of lifecycle emissions than either CORSIA or the approved pathways under the RFS program. EPA's lifecycle analysis on ethanol and other renewable fuels is long overdue for updates and still relies on old data and conservative assumptions leading to inaccurate estimates of lifecycle emissions. Similarly, the ethanol industry is still encouraging CORSIA to integrate more current data and the latest science on U.S. agricultural feedstock cultivation and ethanol production. Although both the RFS pathways and CORSIA pathways rely on outdated information, approved RFS pathways should be considered "similar" to CORSIA for the purposes of 45Z.

More importantly, RFA encourages Treasury and IRS to collaborate with EPA to update the Agency's lifecycle analyses under the RFS. We strongly believe EPA should use the same lifecycle assessment approach that Treasury developed for 45Z (i.e., 45ZCF-GREET). Having different emissions rates values in the two programs for the same fuel could lead to market distortions and increase the risk of reporting and recordkeeping errors. RFA believes that 45ZCF-GREET represents the best and most current understanding of the lifecycle emissions impacts of today's renewable fuel pathways; EPA should follow Treasury's lead in adopting this methodology.

2. **Response to: (2) Any clean fuel production processes that are currently in commerce that might meet the eligibility requirements of § 45Z but are not included in the 45ZCFGREET model that is released simultaneously with this notice.**

Recent technology advancements in the ethanol industry have opened new production pathways for cellulosic biofuel. Specifically, today's ethanol biorefineries are co-producing starch-based ethanol alongside cellulosic ethanol through the use of new, advanced enzyme technologies. EPA recognizes these production pathways and allows cellulosic biofuel RIN (D3) generation for co-produced (in situ) ethanol from the cellulosic components of corn kernel fiber (CKF) and sorghum kernel fiber (SKF).

The conversion of the cellulosic content in grain kernels typically boosts the yield of ethanol per unit of grain by 1-4% or more. These corn and sorghum kernel fiber pathways are recognized in both the RFS and California LCFS but are not yet included in the 45ZCF-GREET model. RFA urges Treasury to include emissions rate pathways for biofuel derived from CKF and SKF and provide the option to segregate those gallons for 45Z credit generation purposes.

Further, for the purposes of determining and demonstrating the volume of cellulosic biofuel per unit of grain, we believe Treasury should use the same approach to CKF- and SKF-derived ethanol for 45Z that it used for the Second Generation Biofuel Producer Credit (formerly at I.R.C. §40(b)(6)).

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RFA looks forward to working with the Treasury and IRS on the implementation of the 45Z provisions. We again urge Treasury and IRS to publish proposed regulations for 45Z as expeditiously as possible. Thank you again for the opportunity to provide these comments. If you have any questions, or need any additional information, please feel free to contact Jared Mullendore, Esq., Policy Counsel and Director of Government Affairs for the Renewable Fuels Association, at jmullendore@ethanolrfa.org or (202) 289-3835.

Sincerely,

Geoff Cooper
President and CEO