

December 3, 2022

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

Via Federal eRulemaking Portal at: www.regulations.gov (IRS-2022-58)

Re: API Comments on Credits for Clean Hydrogen and Clean Fuel Production (Notice 2022-58)

Dear Sir/Madam:

The American Petroleum Institute ("API") is the national trade association representing America's oil and natural gas industry. Our industry supports more than 11 million U.S. jobs and accounts for approximately 8 percent of U.S. GDP. API's nearly 600 members, from fully integrated oil and natural gas companies to independent companies, comprise all segments of the industry. API's members are producers, refiners, suppliers, retailers, pipeline operators, and marine transporters as well as service and supply companies providing much of our nation's energy. API was formed in 1919 as a standards setting organization and is the global leader convening subject matter experts from across the industry to establish, maintain, and distribute consensus standards for the oil and natural gas industry. API has developed more than 800 standards to enhance operational safety, environmental protection, and sustainability in the industry.

On behalf of our member companies, I write in response to the Notice on Credits for Clean Hydrogen and Clean Fuel Production concerning the clean hydrogen production credit under section 45V of the Internal Revenue Code ("45V credit") and the clean fuel production credit under § 45Z ("45Z credit"). As such, our members wish to ensure that the final rules and relevant guidance accomplish the legislative intent of the statute and provide efficient ways to ensure its goals are achieved. We submit these comments to the Department of the Treasury and Internal Revenue Service ("Treasury and IRS") in an effort to assist in developing those goals.

Section 45V and Clean Hydrogen

Clean Hydrogen

The well-to-gate system boundary for hydrogen production includes emissions associated with feedstock growth, gathering, and/or extraction; feedstock delivery to a hydrogen production facility; conversion of feedstock to hydrogen at a production facility; generation of electricity consumed by a hydrogen production facility (including feedstock extraction for electricity generation, feedstock delivery, and the electricity generation process itself); and sequestration of carbon dioxide generated by a hydrogen production facility. The above-mentioned steps include but is not limited to the majority of the steps and emissions that should be included within the well-to-gate system boundary. It would be helpful for Treasury and the IRS to clarify that the scope should include the

processing of feedstocks for use in generation of electricity or use in a hydrogen production facility, as may be required for the use of natural gas or water. Further, Treasury and the IRS should clarify that the well-to-gate system boundary should include the processing of all feedstock, such as natural gas (i.e. for electricity and feedstock use) and water (extraction, processing and purification). In addition, it is our understanding that section 45V should adopt the requirements established under section 45Q for contractually ensuring and demonstrating the appropriate use or sequestration of CO₂ from the hydrogen production process.

We understand that the well-to-gate boundary system should not be inclusive of any Scope 3 emission sources and/or emission sources that are downstream of the hydrogen production gate. For instance, the boundary should not include emissions related to compression of hydrogen nor the transportation of hydrogen. It is our understanding that the 45V credit is based on the production lifecycle rather than the full lifecycle analysis.

It is our understanding that qualified clean hydrogen should allow all technology pathways to compete on a level playing field on the basis of carbon intensity. Policy supported pathways to low carbon hydrogen production should yield net reduction of greenhouse gas emissions on a life cycle basis.

Co-products

It is our understanding that greenhouse gas emissions from co-products should be properly allocated to those co-products, as directed by the International Organization for Standardization ("ISO"), such as standard 14067, and other widely recognized approaches to lifecycle assessments. Similarly, if a co-product of the hydrogen production pathway is displacing emissions that would be generated by independent market production, those avoided emissions should be credited to the hydrogen production pathway. The Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies ("GREET") model includes some of these allocations, for example for steam produced as a byproduct of hydrogen production. Where possible, such as with steam in the GREET model, emissions should be allocated to co-products by use of a system expansion (displacement) approach. Where the clean hydrogen production process results in the production of two or more co-products of commercial value, GHG emissions across products should be allocated according to their respective masses.

It is our understanding that emissions should not be allocated to co-products that would otherwise be characterized as wastes, or that have no economic value.

Production of both qualified clean hydrogen and hydrogen that is not qualified clean hydrogen

It is our understanding that there are multiple actions that may cause a facility to produce qualified clean hydrogen for only a portion of a taxable year, despite producing hydrogen year-round and not necessarily changing any fundamental aspects of the production method. For example, a producer using Renewable Energy Credits ("RECs") to enable electrolytic production based on the theoretical use of renewable electricity may find themselves unable to secure qualifying RECs for the full year or may find that for reasons out of the producer's control, some of the RECs have been disqualified by a regulator. In these cases, the producer may have invested in RECs they assumed would meet the need to qualify for production but may fall short for reasons that are not be within their control.

A qualified low-carbon hydrogen production facility should only earn credits for the qualified low-carbon hydrogen produced. For example, if due to process upset, the plant produces hydrogen with a higher carbon intensity (no qualified hydrogen), then the facility should only receive credit for the qualified low-carbon hydrogen by CI that it

produced. Another condition that may arise could be related to process upsets that limit the ability of a contracted party to fully sequester CO₂ from the hydrogen producer. While the hydrogen producer may have made all of the necessary investments to ensure the production of qualified clean hydrogen, unforeseeable conditions beyond the control of the producer may result in a failure to meet the qualifications (or to qualify at a lower tier) for a portion of the taxable year. Further, a producer may begin a taxable year producing qualified clean hydrogen, only to find that their methodology no longer qualifies (or qualifies at a different tier) later in the same taxable year because of unforeseeable changes to the GREET model. Because there is no fixed schedule for updates or revisions to the GREET model, it will be necessary for Treasury and IRS to ensure that producers are provided with certainty that their method will not become disqualified due to changes in modeling without sufficient time to revise their production method if necessary.

It would be helpful for Treasury and the IRS to clarify that the producer should be able to qualify for certain batches of qualified production over the course of the taxable year. The specific approach may be dependent on the monitoring period that would inform IRS of the production lifecycle emissions of the qualified clean hydrogen.

Verification of the delivery of energy inputs

It is our understanding that verification of a range of energy inputs, and the delivery of those inputs, should be allowed through the use of contractual agreements or market-based mechanisms and emission data that has been reported to and verified by the United States Environmental Protection Agency ("EPA"), such as data reported to the Greenhouse Gas Reporting Program ("GHGRP") (40 CFR part 98).

It is our understanding that power inputs, only those mechanisms that clearly make GHG reductions within the practical bounds of current electrical systems and accounting capability should be allowed.

It is our understanding that the goal of the regulation is to match the time, date and location of clean hydrogen generation as closely as possible to the availability of feedstocks necessary for production. Failure to do so may result in competitive differences between various clean hydrogen production processes. In relation to the granularity of time matching of energy inputs used in the qualified clean hydrogen production process, it is our understanding that time and date of generation as well as location of generation should be considered. Further, the monitoring period to inform Treasury and the IRS will drive the specific approach taken by the taxpayer. In the near-term, hourly matching may not be feasible, although it may become possible over time. Therefore, the granularity required should follow the capability of the market to provide such granularity without causing undue burden on producers.

Alignment with the Clean Hydrogen Production Standard

It is our understanding that the "well-to-gate" boundary approach should be the definition for the 45V production lifecycle analysis, as indicated by the Inflation Reduction Act ("IRA"). Additionally, it is our view that the 45V credit approach should not be developed to align with the Clean Hydrogen Production Standard ("CHPS").

It would be helpful for Treasury and the IRS to develop a production standard, inclusive of a full notice and comment, to apply to the 45V credit specifically. The CHPS drafted by the Department of Energy ("DOE") does not meet the Administrative Procedure Act ("APA") requirements. The DOE has previously stated that the CHPS is not

a regulatory standard and was developed for different purposes.¹ Specifically, the CHPS “serves only to guide the DOE’s hydrogen programs in EAct 2005.”

Further, the IRA requires that the IRS use the GREET model, “or a successor model as determined by the Secretary.” It is unclear how the Secretary will determine or select the timing of when or how to adopt a successor model. While the IRA refers to the Secretary of Treasury, the GREET model, as a product of Argonne National Laboratory, is the responsibility of the DOE, potentially limiting the ability of the Secretary to determine when or how to adopt a successor model. As the CHPS is also reliant on the GREET model (and any successor version), the draft guidance issued by DOE may represent the only opportunity for stakeholders to raise concerns over the design of the model or its ability to address the needs of the BIL and the IRA. Full adherence to the APA would allow for a more complete opportunity to engage in the improvement of the GREET model. Stakeholders could be given a greater opportunity to provide additional data that may assist in the development of the model, or an opportunity to indicate which areas in the model should be prioritized for improvement.

Through the rulemaking process, Treasury and IRS should ensure that rules and standards relating to the analysis of lifecycle greenhouse gases for section 45V are developed using notice and comment and do not incorporate by reference other standards, such as CHPS, that are not themselves valid agency regulations which may lack stakeholder input and are subject to change without notice. This rulemaking process would also include aspects of section 45V such as the determination of successor models to GREET. It is our understanding that adherence to APA processes, including the establishment of a formal docket, would allow for stakeholders to review comments submitted by other interested parties. Information sharing can help to address and alleviate concerns simply by enabling stakeholders to review and consider different points of view or solutions to commonly voiced problems as proposed by others. The review element of the process could also help to find an acceptable path forward on any such problems by allowing stakeholders to show alignment behind a specific approach. Noting the complexity of the legislative process, it is our understanding that this is an opportunity that can help stakeholders better understand agency decision-making regarding which arguments the agency may find the most compelling and to which comments the agency may apply greater value.

Provisional emissions rate

It is our understanding that a producer should be able to file a petition for a provisional emissions rate as early as possible in the process, including pre-construction. A potential producer’s investment in a hydrogen production facility may be dependent on their ability to gain a provisional rate based on a novel facility design. As currently developed, the GREET model only allows for one thermal production pathway – steam methane reformation. As investors recognize the value of lower emission production methods, they may wish to design facilities that are not reflected by the GREET model.

Further, a producer should also be able to file a petition for a provisional emissions rate within a reasonable window of any potential changes to the GREET model. Changes to the GREET model are not scheduled and may challenge the ability of a producer to meet the definition or a specific tier of qualified clean hydrogen production. Therefore, it would be beneficial for a producer to be given a reasonable amount of time to file a petition for and receive a provisional emissions rate with any changes to the GREET model.

¹ <https://www.hydrogen.energy.gov/pdfs/clean-hydrogen-production-standard.pdf>

It would be helpful for the Secretary to consider the use of ISO or other established lifecycle analysis approaches as applied by the taxpayer when petitioning for a provisional emissions rate. Determining the provisional emissions rate, or a single specific methodology required, should not be the responsibility of Treasury and the IRS. Third party validation of the approach taken by the taxpayer should be required.

Recordkeeping and Reporting

Taxpayers seeking to qualify for the 45V credit will be able to create documentation of inputs to and output from the GREET modeling that expresses their specific production lifecycle emission rate. Some of the input documentation may be currently found in the GHGRP, including value chain inputs, annual facility emissions, and CO₂ storage data. Taxpayers may also have records of transactions of market-based mechanisms, such as emission certificates, EACs, and bundled with power purchase agreements. These record sources could be combined with records of hydrogen production and/or sales, and contracts or purchase records for value chain inputs.

It would be helpful for Treasury and the IRS to seek to avoid approaches that require taxpayers to develop new or duplicative approaches or materials that could be met those that are already established.

It would be beneficial to taxpayers for Treasury and the IRS to not mandate the use of a specific technologies and methodologies for monitoring the lifecycle greenhouse gas emissions rate. Additionally, taxpayers would benefit from Treasury and the IRS analyzing the ability of a methodology or range of methodologies to meet the monitoring needs for the verification of the clean hydrogen production process.

In summary, API requests that Treasury and the IRS allow taxpayers to use existing documentation, substantiation, and monitoring methodologies to demonstrate lifecycle greenhouse gas emissions.

In the case of taxpayers who serve as both the clean hydrogen producer and the clean hydrogen user, it is our understanding that verification of emission reductions may be easier when a taxpayer serves as both the producer and the user because those reductions should be measurable within the fence line of the facility and may already be reported to the EPA in the GHGRP. The change in emission reductions should relate directly back to the volumes of hydrogen produced and used, at least on an average basis.

Indirect book accounting factors

Market-based mechanisms, or book-and-claim systems, should be allowed to demonstrate a taxpayers effective greenhouse gas emissions. This should include RECs, Power Purchase Agreement ("PPA"), emissions certificates (including natural gas certificates), and Energy Attribution Certificates ("EACs") and carbon tags. However, use of such systems should be limited to those that apply directly to the production process, and not general offsets.

Allowance of market-based mechanisms is also consistent with legislative intent for section 45V, as articulated in a colloquy between Senator Wyden and Senator Carper:

Mr. CARPER. "In section [45V], the term 'lifecycle greenhouse gas emissions' for a qualified hydrogen facility is determined by the aggregate quantity of greenhouse gas emissions through the point of production, as determined under the most recent Greenhouse gases, Regulated Emissions, and Energy use in Technologies—GREET—model. It is also my understanding of the intent of section [45V], is that in determining 'lifecycle

greenhouse gas emissions' for this section, the Secretary shall recognize and incorporate indirect book accounting factors, also known as a book and claim system, that reduce effective greenhouse gas emissions, which includes, but is not limited to, renewable energy credits, renewable thermal credits, renewable identification numbers, or biogas credits. Is that the chairman's understanding as well?

Mr. WYDEN. Yes."²

In determining the greenhouse gas emissions rate using these book accounting factors, it would be helpful for Treasury and the IRS to clarify how location, time, and date of generation of the relevant mechanism should be considered.

Coordinating with section 45Q

Section 45V(d)(2) prevents any section 45V credit with respect to any qualified clean hydrogen produced at a facility that includes carbon capture equipment for which a section 45Q credit has been allowed to any taxpayer. However, section 45V(d)(2) does not go on to specify the scope of the bare term "facility." The language in section 45V(d)(2) appears to presume that all qualified clean hydrogen production facilities would be standalone facilities and that any carbon capture equipment would be used for the sole purpose of reducing the emissions of the hydrogen production process.

It should be noted that it is unlikely for all qualified clean hydrogen production facilities to be standalone facilities, as a significant portion of hydrogen produced in the United States is produced in facilities that include other processes. For example, of the 140 refineries that reported emissions to the GHGRP, 40% reported emissions from hydrogen that are distinct from other refining operations. Similarly, in 2014, the Energy Information Administration ("EIA") estimated that roughly 1/3rd of hydrogen used in refineries was produced on-site.

It would be helpful for Treasury and the IRS to clarify the definition of facility such that in cases where there are multiple unrelated process trains at a single site, such a site may qualify for both the 45V credit and the section 45Q credit if the credits are applied to unrelated processes. It is our understanding that the intent of both the 45V and 45Q credits is to move the technology and deployment of Carbon capture and storage ("CCS") and clean hydrogen production forward. It should be noted that limiting the use of CCS at a facility that also produces hydrogen (or fuels qualifying under section 45Z), or vice versa, would run contrary to the intent of the credits.

It is our understanding that an overly broad interpretation of the term "facility" in section 45V(d)(2) could encompass industrial plants that include multiple production trains, some of which produce clean hydrogen under section 45V, and other production trains that are co-located in the plant but employ separate processes to produce separate products (e.g., heating units, chemical synthesis, and direct air capture (DAC) facilities). Allowing carbon capture from these separate production trains to qualify for the section 45Q credit, and the clean hydrogen production trains to qualify for the section 45V credit, would not result in doubling up on credit for capturing the same CO₂.

Further, Treasury and the IRS should clarify that carbon capture equipment installed on combustion or DAC CO₂ sources for which section 45Q credits are allowed should not disqualify hydrogen produced at an unrelated hydrogen production train from qualifying for the section 45V credit.

² Congressional Record, Aug. 6, 2022, p.4165.

Another example is an ammonia fertilizer manufacturing facility that may have multiple processes with multiple emission points. The operator of such a facility may choose to produce hydrogen onsite using electrolysis and convert that hydrogen to ammonia via the Haber-Bosch process, which requires high heat (300 – 500 °C). The facility may rely on fossil fuels to reach such temperatures and may wish to capture the resulting CO₂ from the combustion of those fuels. In this circumstance, the act of clean hydrogen production covered by 45V is clearly delineated from the conversion to ammonia with CCUS covered by 45Q. It is our understanding that the facility should be allowed to claim the 45V credit for the hydrogen production, and subsequently claim the 45Q credit as the clean hydrogen is converted to ammonia while capturing CO₂ emissions. While this example uses renewable electrolysis for illustrative purposes, there should not be a distinction made for thermal production pathways that occur within facilities that also use Carbon Capture, Use, and Storage ("CCUS") at other process points.

As such, it would provide helpful clarification and be consistent with existing IRS guidance for Treasury and the IRS to construe section 45V(d)(2) to disallow section 45V credits only with respect to clean hydrogen produced through a clean hydrogen production train for which section 45Q credits also are claimed. More specifically, a "facility" for purposes of section 45V should be defined as a clean hydrogen production train consisting of the equipment and processes which are an integral part of the production of the clean hydrogen. The production train begins at the point the feedstock enters the process and ends at the point the product is in its final form, whether or not such product continues within an unrelated process train. Such facility does not include equipment (including carbon capture equipment) or processes that are in the same geographic location but perform functions unrelated to production of clean hydrogen from the clean hydrogen production train.

A narrow definition of "facility" is consistent with how "facility" has been defined by the IRS for purposes of other production-based tax credits. For instance, Rev. Rul. 94-31 provides guidance on what is a qualified wind facility for purposes of the production tax credit under section 45. Rev. Rul. 94-31 concludes, in part, that each individual wind turbine together with its tower and supporting pad is a separate "facility." Another example is Notice 2008-60 which concludes that for purposes of section 45 an open-loop biomass facility includes all burners and boilers, any handling and delivery equipment that supplies fuel directly to and is integrated with such burners and boilers, steam headers, turbines, generators, and all other depreciable property necessary to the production of electricity. The Notice goes on to hold that the facility does not include property used for the collection, processing, or storage of open-loop biomass before its use in the production of electricity, transformers or other property used in the transmission of electricity after its production, or ancillary site improvements, such as roadways and fencing, that are not necessary to the production of electricity. Each biomass power plant that is operated as a separate integrated unit is treated as a separate facility for purposes of section 45.

Other Comments Relating to Section 45V

The functionality of the GREET model is central to the success of the development of a clean hydrogen economy and for the eligibility of taxpayers to qualify for the credit. At this time, despite recent updates, the GREET model is not well suited to evaluate the production lifecycle emissions of clean hydrogen from all potential sources. The model is deficient in its representation of value chain inputs, production methodology and facility design, and in clarifying the ability to limit the boundary to the production gate. It would be beneficial for taxpayers if there were immediate updates to the GREET model, to allow for investors to move forward in the absence of provisional emissions rates. It would be helpful for Treasury and the IRS to publicize the updates in an effort to encourage the participation of industry and other stakeholders.



Section 45Z

It is our understanding that Treasury and the IRS should consider the following principles and practices as a guide to developing the 45Z, Clean Fuel Production Credit. The application of these principles is the basis for API's comments below.

1. The CFPC should incentivize the development of lower carbon intensity fuels.
2. The 45Z credit should be considered a producer's tax credit not a blender's tax credit: The sale of a qualified fuel to an unrelated person should be considered the critical path to the use of the CFPC.
3. To receive the credit, the fuel should be manufactured and sold in the U.S. but not necessarily consumed in the United States.
4. A producer should be able to file a petition for a provisional emissions rate as early as possible in the process, including pre-construction.
5. To qualify for the tax credit, it should be unnecessary to track the fuel's ultimate use.
6. Documentation related to the sale and/or use of the fuel should be limited to what is actually required and feasible to ensure, (i) congressional intent to reduce carbon emissions, (ii) a level playing field, and (iii) program integrity.
7. The sale of product within a manufacturer's own facility is allowed if it is a sale to a separate entity where there is less than 50 percent ownership in that facility.
8. The 45Z tax credit should be available to an entity that produces a qualified fuel (e.g., ethanol, renewable diesel, biodiesel, renewable naphtha, etc.) that is sold "for use in the production of a fuel mixture" [45Z(a)(4)(a)]

Section 45Z(a)(4) - sales of fuel and permitted uses

Section 45Z(a)(4) requires a sale of fuel to an unrelated person and further requires that the fuel sold must be (A) for use by such person in the production of a fuel mixture, (B) for use by such person in a trade or business, or (C) sold by such person at retail and placed in the fuel tank of the retail buyer. In implementing these provisions, Treasury and the IRS should consider that section 45Z is a producers' tax credit that should incentivize the production of clean fuels that are suitable for use in transportation, and such fuels could be used for other purposes that would also result in less carbon emissions.

As such, it would be beneficial to taxpayers for Treasury and the IRS to avoid establishing limitations that would unnecessarily preclude producers of qualified fuels from being eligible to claim a tax credit across all types of sales. Further, Treasury and the IRS should avoid the requirement of tracking fuel after a sale as the fuel could be used for a non-transportation purpose but still result in reduced carbon emissions. For example, a qualifying diesel fuel that is produced with the intention of being used in an on-road application could be used as home-heating oil and result in similar carbon emission reductions as the on-road use. To that end, it is appropriate to show that the product was sold to an unrelated person but not to track the end use of the product.

Treasury and the IRS should clarify that under section 45Z(a)(4)(B) the "use by such person in a trade or business" should allow for that unrelated person to consume the qualified product, to sell it for its intended use, or to sell it for a different purpose.

Section 45Z(d)(5) - transportation fuel

Section 45Z applies to any "transportation fuel" and section 45Z(d)(5) defines transportation fuel as one that is "suitable for use as a fuel in a highway vehicle or aircraft." API requests additional clarity around transportation fuel specifications for this purpose.

Taxpayers would benefit from further discussion and consideration relating to the sale of hydrogen, e-fuels, and electricity that have other uses beyond transportation and how those fuels may qualify for the Clean Fuel Production Credit ("CFPC"). Lastly, further clarification verifying that fuels used in off-road applications such as marine, locomotives, agriculture, and heating oil, that utilize fuels that meet on-road specification are also eligible for the tax credit is required. This includes, but is not limited to, fuels that meet ASTM D4814, D975, D7467, D6751, D5797, D5798, SAE J2719, J1616, J2699. It is our understanding that the above-mentioned is consistent with section 45Z (d)(5)(A)(i).

Treasury and the IRS should consider that a qualified fuel that is designated as suitable as a transportation fuel by the producer and that is directly sold at retail or blended into finished fuel for sale at retail should qualify for the 45Z credit.

Treasury and the IRS should consider establishing a nonexclusive listing of transportation fuels that are eligible for the fuel production credit that are not otherwise prohibited under section 45Z. For example, a nonexclusive listing could include but is not limited to gasoline, diesel, kerosene, jet fuel, sustainable aviation fuel, aviation turbine fuel (jet) ethanol, methanol, butanol, renewable diesel, renewable naphtha, renewable propane, biodiesel, and renewable natural gas. Additionally, Treasury and the IRS should establish a mechanism for approval of additional transportation fuels that may be amended on at least an annual basis.

Establishment of Emissions Rate for Sustainable Aviation Fuel

Treasury and the IRS should consider monitoring for the latest versions of emission rate models including considering updating the emission rates that qualify for the CFPC as needed to accept either the latest version of models that assess the aggregate quality of greenhouse gas emission or a version of models that are utilized by other domestic federal or state jurisdictions.

It is our understanding that keeping aviation and non-aviation fuels evaluated on the same basis will help avoid unintended dislocations in product value and simplify the administration of the rule. In establishing the Published Emissions Rates, it would be helpful for Treasury and the IRS to apply a consistent lifecycle GHG methodology to ensure consistency across all fuels covered in the IRA.

Multiple federal and multiple state programs may use "similar" methodologies to calculate rate emissions for sustainable aviation fuel ("SAF") to implement their state programs. Treasury and the IRS should clarify what constitutes a methodology as being "similar" and establish a basis for demonstrating such. It would be helpful for Treasury and the IRS to consider the recognition of these programs as "similar" methodologies. It is our understanding that such programs include section 211(o)(2) the Clean Air Act (42 U.S.C. 7545(o)(2)), or those models utilized in the implementation of the California Low Carbon Fuels Standard, Oregon Clean Fuels Program, Washington Clean Fuels Program, or other domestic state programs enforced during the same period that the Clean Fuels Production Credit is active.

Further, Treasury and the IRS should clarify whether SAF (and non-aviation fuel) with negative lifecycle GHG emissions can receive credit for the portion of the lifecycle GHG value below zero.

Provisional Emissions Rates

The IRS should consider allowing a producer to file a petition for a provisional emissions rate as early as possible in the process, including pre-construction. This is critical to allowing a taxpayer to understand the possible available tax credits for the new fuel process.

We suggest that there are multiple considerations related to the provisional pathway when the emission rate has not been previously established and Treasury and the IRS should err on the side of allowing provisional pathways that incentivize the development of lower the carbon intensity fuels.

It is our understanding that provisional pathways should be used in the event that the emissions rates provided on the annual table do not effectively represent the pathway being used. Treasury and the IRS should clarify that in these instances the taxpayer should be allowed to apply a provisional emissions rate based on lifecycle analysis consistent with section 45Z requirements.

Additionally, where appropriate, a taxpayer should be allowed to file a petition for a provisional emission rate using the same data as any application for a pathway that is submitted to federal or state regulatory program that approves emission rates using variations of the GREET model. This could include California Low Carbon Fuels Standard, Oregon Clean Fuels Program, Washington Clean Fuels Program, or other domestic state programs enforced during same period that the Clean Fuels Production Credit is active. Further, Treasury and the IRS should clarify that a taxpayer should be able to file for a provisional rate for its fuel any time that the fuel producer has the data to estimate an emissions rate. In the event that a pathway is not available in GREET, or another federal pathway, then the provisional emissions rate should include all estimated energy inputs, yields and/or conversion rates, and feedstocks and production.

At the next update of the emissions rate table, it would be helpful for Treasury and the IRS to add new entries to the table that effectively represent any provisional emissions rates received, and approved, since the last update or assign them to an existing table entry if it is found that the new emissions rate would be rounded to a similar, existing entry.

It is our understanding that a taxpayer should be able to file for a provisional rate if it can demonstrate that its fuel's emission rate is lower than that of the corresponding fuel in the table. An appropriate reconciliation could be considered to address any discrepancies.

Special Rules

In the situation where an aviation fuel producer is not directly complying with the referenced Carbon Offsetting and Reduction Scheme for International Aviation ("CORSA") requirements, under section 45Z(b)(1)(B)(iii)(1), the aviation fuel producer should be able to employ a 1) 3rd-party verifier certified through a state level GHG program, or 2) party qualified by the EPA for conducting attests for the Renewable Fuels Standard (40 CFR 80 Subpart M) that can confirm that the equivalent supply chain traceability and information transmission requirements are met.

Multiple Owners

Treasury and the IRS should consider maintaining flexibility for companies to manage taxes through a joint venture as well as the allocation of any fuel production credits commercially/contractually amongst the multiple owners.

Other Comments

API requests that Treasury and the IRS consider implementing the Administrative Procedures Act ("APA") procedures for Requests for Comments and the expected subsequent Proposed Guidance. It would be helpful for Treasury and the IRS to provide clarity on the process to be followed for public comment and rulemaking between now and implementation.

It would be helpful for Treasury and the IRS to clarify the definition of "qualified facility" under section 45Z(d)(4). Specifically, it will be important to understand how the anti-stacking rules of section 45Z(d)(4)(B) apply. For example, clarification is needed if a refinery produces either clean hydrogen or sequesters carbon in order to qualify for the section 45Q or section 45V credit, whether the taxpayer precluded from claiming a credit under section 45Z. A "qualified facility" should be more narrowly defined to only include the unit of property that is used in the production of biofuels at a refinery and not the unrelated units on the property (i.e., those associated with carbon capture or clean hydrogen production). Similar to the recommendations relating to the definition of "facility" for section 45V, a "facility" for purposes of section 45Z should be defined as a clean fuel production train consisting of the equipment and processes which are an integral part of the production of the clean fuel. The production train begins at the point the feedstock enters the process and ends at the point the product is in its final form, whether such product continues within an unrelated process train. Such facility does not include equipment (including carbon capture equipment) or processes that are in the same geographic location but perform functions unrelated to production of a clean fuel from the clean fuel production train.

Additionally, it would be helpful for Treasury and the IRS to clarify the production in the United States. API supports using imported feedstocks and intermediates; however, it should be noted that production should involve meaningful chemical changes to the feedstocks rather than simply blending, or other simple combinations/separations. Lastly, API supports the incorporation of regenerative farming practices, cover crops, and other feedstock decarbonization methods in the calculation of emissions rates.

Treasury and the IRS should exclude the use of energy efficiency ratio ("EER") in assessing an emissions rate for electricity or any other transportation fuel. It would be beneficial for Treasury and the IRS to clarify that co-processing of any feedstock is acceptable if it results in lower carbon intensity fuels.

Treasury and the IRS should clarify that the determination of the "gallon equivalent" amount under section 45(Z)(a)(1)(A) for non-liquid fuels at 60 degrees Fahrenheit should be based on energy equivalency basis compared to gasoline. Specifically, it would be beneficial for taxpayers to be able to utilize the standard gallon-gasoline equivalent ("GGE").

In relation to the sale of ethanol, Treasury and the IRS should clarify whether the definitions under section 45Z(a)(4) are applicable to ethanol sales. Should Treasury and the IRS find those definitions to be applicable to ethanol sales, then taxpayers would benefit from having further clarification of how those might be applied. In

relation to biointermediates, such as using alcohol to manufacture jet fuel, Treasury and the IRS should clarify whether a taxpayer may qualify for a CFPC credit for the production of both ethanal and the creation of SAF.

It would be helpful for Treasury and the IRS to clarify that CCS on biofuel manufacturing (e.g. ethanol fermentation) can either get credited toward section 45Z or section 45Q, although the combination of both credits is not permitted.

It would be helpful for Treasury and the IRS to clarify where the RNG transportation fuel is measured.

We appreciate the opportunity to comment and look forward to continued interaction as this process moves forward. To the extent you have any questions, please do not hesitate to contact me at colgana@api.org or 202-682-8044.

Sincerely,



Aindriu Colgan
Director, Tax and Trade Policy