

December 2, 2022

To: Hon. Charles B. Retting, Commissioner

Internal Revenue Service Department of the Treasury

Re: Response of the American Chemistry Council ("ACC") to Requests for Comment on

1) Notice 2022-58, 2) Notice 2022-57, and 2) Notice 2022-56.

Submitted via: www.regulations.gov

Dear Commissioner Retting:

On behalf of the American Chemistry Council (ACC) and its members, I am pleased to submit comments in response to the three notices issued by the Department of Treasury (Treasury) and the Internal Revenue Service (IRS) on November 4, 2022. These notices include: 1) Notice 2022-58 request for comments on Credits for Clean Hydrogen and Clean Fuel Production, 2) Notice 2022-57 request for comments on the Credit for Carbon Oxide Sequestration, and Notice 2022-56 request for comments on Section 45W Credit for Qualified Commercial Clean Vehicles and Section 30C Alternative Fuel Vehicle Refueling Property Credit.

The historic energy and manufacturing innovation incentives and infrastructure investments contained in the Inflation Reduction Act (IRA) and 2021 Bipartisan Infrastructure Legislation (BIL) have the potential to reshape the U.S. economy and move the Nation toward a lower emissions future. To unlock the potential of these laws, policymakers, businesses, and the citizenry now must work together to advance rather than impede rapid implementation.

ACC represents a diverse set of companies engaged in the business of chemistry, an innovative, \$517 billion enterprise. ACC members work to solve some of the biggest challenges facing our Nation and our world, driving innovation through investments in research and development (R&D) that exceed \$11 billion annually. They supply the chemical products, polymers, and materials underpinning the energy sector's industrial base and the energy efficiency, clean energy, and clean energy-enabling technologies needed for a low-carbon economy.

Our members are also taking action to reduce the industrial greenhouse gas (GHG) intensity of their own supply chains, operations, and products, making them essential partners in IRA implementation. The sector's greenhouse gas carbon mitigation strategy includes consideration of a broad range of emissions sources and sinks, including upstream fuel and feedstock emissions, manufacturing process emissions, energy emissions from heat and power, avoided carbon during the use phase, and both emissions



and mitigation during the end-of-life and recycling phase. Each point in the lifecycle raises novel technology challenges. Moreover, even where technologies have been demonstrated for a particular application or industrial segment, translation and validation of that technology at commercial scale may be costly, time consuming, and risky.

The IRA tax incentives could provide an early and essential foundation for action by chemical manufacturers and other energy intensive, trade-exposed, and hard-to abate industries – if implemented in a clear, pragmatic, and constructive manner. We applaud the commitment of the Treasury Department and the IRS for focusing on the principles of "robust public engagement," "clarity and certainty," and "sound stewardship" throughout the implementation process. ACC urges Treasury to consider three additional guiding principles: "supply chain perspective," "policy alignment," and "capacity building" as summarized below.

- **Supply chain perspective:** While many vital lower-emissions energy and manufacturing solutions are progressing toward or have reached early-stage commercial-scale viability, continued federal support for innovation is needed to increase the efficacy, efficiency, reliability, and cost-effectiveness of the applied technologies and the enabling equipment, components, materials, and chemistries within their supply chains. This requires a broad, inclusive interpretation of which types of facilities, technologies, components, and materials qualify for federal incentives. Narrow interpretation and qualification for federal incentives could result in supply chain bottlenecks between suppliers to the renewable energy industry and those within the industry producing renewable energy products and/or technologies.
- **Policy Alignment:** IRA tax credits and funding provide powerful incentives for innovation and technology deployment provided federal regulatory policy supports these objectives. ACC urges the Treasury Department and IRS to work with DOE, EPA, and other agencies to reduce barriers and ensure the regulatory process supports the continued innovation and deployment of lower emissions technologies, products, and projects. This includes using science and best available information to support a risk-based review and approval process under the Toxic Substances Control Act for the myriad of new and existing chemistries used within energy and manufacturing supply chains, and working to expedite the project siting and permitting processes using transparent, objective and fact-based approaches to deploy lower emissions solutions.
- Capacity Building: A necessary predicate to the economic and climate transformation sought through the IRA is rapid and broad expansion of the Nation's clean energy, manufacturing, and transportation infrastructure linking suppliers, manufacturers, and users. Guidance should recognize these linkages and account for the time and incremental adjustment needed for this infrastructure build-out when establishing or interpreting dates, milestones, and deadlines for qualifying projects. Applying overly stringent standards for qualification could preclude parties from leveraging the incentives and reduce early investment.



Below we have provided specific responses to the notices.

I. Responses to Notice 2022-58 ("Request for Comments on Credits for Clean Hydrogen")

A. General Request for Comments

Qualified clean hydrogen should allow all technology pathways to compete on a level playing field. ACC sees the following issues as urgent for clarification, as they will inform our members assessment of the viability of the tax credit as a tool to invest in new or increased hydrogen production capabilities:

- 1. Confirm flexibility with respect to selection of alternative lifecycle assessment models or tools as substitutes or complements to GREET, where appropriate, to 1) allow taxpayers to incorporate its lifecycle analysis (LCA) compliance analysis with its broader sustainability programs and tools; and 2) select tools that are tailored to the unique profile of their specific operations and value chains. Treasury should issue robust guidance to ensure that alternates provide consistent results to GREET for pathways that are common to both GREET and any alternate.
- 2. GREET should be updated to provide flexibility for user-defined 'pull-down' options to differentiate specific project H2 carbon intensity and allow for differentiation that is representative of project attributes. There should also be an option to utilize project-specific lifecycle analysis consistent with ISO 14067 if inputs are beyond what current GREET model can accommodate.
- 3. Confirm that the standards and definitions used for the hydrogen production tax credit are consistent the statute.

B. Response to Specific Treasury Comments

• What, if any, guidance is needed to clarify the definition of qualified clean hydrogen?

ACC provided comments to DOE in response to its separate comment request on its draft Clean Hydrogen Production Standard Guidance. These comments are attached as Exhibit A. As reflected therein, ACC encourages the Administration to adopt definitions that provides producers with the maximum level of flexibility, consistent with the underlying statute, to utilize the specific technologies and production methods best suited for their location, energy, feedstock, technical, regulatory, and other constraints.

Treasury should provide clear criteria, while avoiding prescriptive technology or process-based generalizations, on how companies can determine their compliance with the various definitions and standards. Similarly, Treasury should provide companies with



flexibility to select the model or methodologies tailored to their operations, provided they are validated by a third-party and certified under applicable ISO standards.

 Section 45V defines "lifecycle greenhouse gas emissions" to "only include emissions through the point of production (well-to-gate)." Which specific steps and emissions should be included within the wellto-gate system boundary for clean hydrogen production from various resources?

Well-to-gate GHG emissions (and associated product GHG intensity) in the H2 production lifecycle are driven by feedstock sourcing, processing, and delivery, energy sourcing, delivery, and use, and the H2 production processes itself, including combustion emissions, process emissions, and power. These emissions sources must be appropriately and accurately allocated across different co-products. Finally, the LCA boundary should account for any GHGs that are captured, stored, and either reused in onsite operations, or transported offsite for permanent storage

• How should lifecycle greenhouse gas emissions be allocated to coproducts from the clean hydrogen production process? For example, a clean hydrogen producer may valorize steam, electricity, elemental carbon, or oxygen produced alongside clean hydrogen.

Emissions allocation across co-products and processes is a particularly important issue within the chemical sector, due to the diversity of products that can emerge along a complex production process. Co-production and coprocessing often introduce different types and quantities of specific feedstocks and energy at different points of the production process for specific products, while having no productive value for other product streams.

Coproduction and coprocessing are highly beneficial from both an economic and environmental perspective, as they maximize the efficiency of energy-intensive operations, minimize process emissions and waste, and conserve feedstocks. Federal policy should incentivize, or at least avoid discouraging, coprocessing by allowing companies to calculate energy and process emissions at a level appropriate to allocate such emissions accurately to each product. There should also be an option to utilize project-specific lifecycle analysis consistent with ISO 14067 if inputs are beyond what current GREET model can accommodate.

It is important that producers have the ability to secure policy support for a project if it can be demonstrated by a provisional emissions rate input. Given the nascent H2 industry, policy support and certainty over the life of the production tax credit program will be critical to investment decisions; therefore, any changes to the GREET model or methodology that could affect eligibility for the tax credit should be carefully considered and follow robust consultation with stakeholders.



• What considerations support the recommended approaches to these issues?

Allowing an accurate accounting of greenhouse gas emissions across specific steps in the product lifecycle, adjusted to address the appropriate allocation across feedstocks, processes, and products, will encourage the most efficient use of resources and send the proper technical and financial signals to companies needed to incentivize sustainable operations.

In contrast, policies that allocate emissions to one or more products or coproducts using default factors or averages may discourage efficient use of manufacturing resources and also discourage companies from capturing and utilizing incidental hydrogen for productive, low-emissions purposes.

 How should lifecycle greenhouse gas emissions be allocated to clean hydrogen that is a by-product of industrial processes, such as in chloralkali production or petrochemical cracking?

Treasury Guidance should allow filers to allocate GHG emissions to the feedstock or process driving the emissions, consistent with an ISO-certified, third-party validated LCA model or methodology.

• How is byproduct hydrogen from these processes typically handled (for example, venting, flaring, burning onsite for heat and power)?

Treasury Guidance should allow filers to allocate GHG emissions to the feedstock or process driving the emissions, consistent with an ISO-certified, third-party validated LCA model or methodology.

• If a facility is producing qualified clean hydrogen during part of the taxable year, and also produces hydrogen that is not qualified clean hydrogen during other parts of the taxable year (for example, due to an emissions rate of greater than 4 kilograms of CO2-e per kilogram of hydrogen), should the facility be eligible to claim the § 45V credit?

The guidance should provide taxpayers with the flexibility to produce qualified clean hydrogen during the periods it can do so in a technically and economic-manner, provided that the company can provide third-party validation for its lifecycle compliance with the emissions intensity requirements during the production periods claimed. This flexibility will be particularly important during early years of the expansion and transition of hydrogen production to lower-emissions processes.

- Recordkeeping and Reporting.
 - (a) What documentation or substantiation do taxpayers maintain or could they create to demonstrate the lifecycle



greenhouse gas emissions rate resulting from a clean hydrogen production process?

Guidance should provide taxpayers with flexibility to report and utilize the greenhouse gas footprints of the actual feedstock and power sources (e.g., certified natural gas, renewable natural gas or renewable power dedicated through power purchase agreements ("PPAs") bundled with environmental attribute certificates ("EACs") used for hydrogen production.

(b) What technologies or methodologies should be required for monitoring the lifecycle greenhouse gas emissions rate resulting from the clean hydrogen production process?

ACC recommends against imposing any single technology or methodological requirements for monitoring, as it may preclude participation or eligibility of some otherwise qualified manufacturers from participating and constrain innovation with respect to monitoring technologies and practices. Companies may already have invested in technologies or practices for conducting relevant monitoring, or may face technical constraints in installing specific equipment.

(c) What technologies or accounting systems should be required for taxpayers to demonstrate sources of electricity supply?

ACC recommends against imposing mandatory technology or accounting systems that may be inconsistent with those in use or practicable for specific operations. Requirements should be performance based.

• Coordinating Rules.

- (a) Application of certain § 45 rules.
- (a)(ii) Section 45V(d)(1) states that the rules for facilities owned by more than one taxpayer are similar to the rules of § 45(e)(3). How should production from a qualified facility with more than one person holding an ownership interest be allocated?

Production from a qualifying facility with more than one person having an ownership interest should be allocated according to % ownership interest or other basis as determined and agreed upon by parties with ownership interest.

(c) Coordination with § 45Q. Are there any circumstances in which a single facility with multiple unrelated process trains could qualify for both the § 45V credit and the § 45Q credit notwithstanding the prohibition in § 45V(d)(2) preventing any § 45V credit with respect to any qualified clean hydrogen produced at a facility that includes carbon capture equipment for which a § 45Q credit has been allowed to any taxpayer?



Language in the IRA presumed that all qualified clean hydrogen production facilities would be standalone facilities. This is unlikely to be the case, as a significant portion of hydrogen produced in the United States is produced in facilities that include other processes. Any facility in which there are multiple unrelated processes should qualify for both the 45V credit and 45Q credit if the credits are applied to unrelated processes. The clear intent of both credits is to move the technology and deployment of CCS and clean hydrogen production forward. Limiting the use of CCS at a facility that also produces hydrogen, or vice versa, would run contrary to the intent of the credits.

• Additional requests for clarification and guidance

The Guidance should clarify the criteria on capital spend or the modifications that need to made for an existing facility to go from a facility that produces "not clean hydrogen" to "qualified clean hydrogen." For example, whether the capital spend on fuel switch from manufacturing Blue H2 on the existing Steam cracker count towards producing qualified clean hydrogen.

Whether a taxpayer can a claim higher value of credits by moving into different tiers of qualified clean hydrogen (for example moving from < 4 kilograms of CO2-e per kilogram of hydrogen to < 1.5 kilograms of CO2-e per kilogram of hydrogen). If so, what are the criteria on capital spend or the modifications that need to made for an existing facility to qualify to move into the tiers of higher credits.

• Please provide comments on any other topics related to § 45V credit that may require guidance.

Treasury should clarify if the "capital account" charge has to apply directly to the hydrogen production facility or if it can be anywhere in the value chain to enable clean hydrogen production to be claimed for the stated facility.

II. Responses to Notice 2022-58 ("Request for Comments on Clean Fuel Production Credit (§ 45Z))

Establishment of Emissions Rate for Sustainable Aviation Fuel. What methodologies should the Treasury Department and IRS consider for the lifecycle greenhouse gas emissions of sustainable aviation fuel for the purposes of § 45Z(b)(1)(B)(iii)(II)?

Treasury should define what it means by methodology. This term can mean many things. For any methodology adopted, it should utilize well-established models and be consistent across all fuels (road, aviation) and fuel producers unless a basis to do otherwise is supported with data / analysis. Treasury should clarify if SAF with negative lifecycle GHG emissions can receive credit for the portion of the lifecycle GHG value below zero.

• Provisional Emissions Rates. Section 45Z(b)(1)(D) allows the taxpayer to file a petition with the Secretary for determination of the emissions rate for a transportation fuel which has not been established.



- (a) At what stage in the production process should a taxpayer be able to file a petition for a provisional emissions rate?
- (b) What criteria should be considered by the Secretary to determine the provisional emissions rate?

Treasury should clarify what constitutes a 'transportation fuel for which an emissions rate has not been established." Specifically, whether that means fuel with different feedstock, different process, or any factor resulting in different lifecycle GHG emissions value.

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 so published.

In addition, Taxpayer should be able to file for a provisional rate for its fuel any time after the fuel is covered under an approved ASTM pathway and the fuel producer has the data to determine an emissions rate

• Multiple Owners. How should production from a qualifying facility with more than one person having an ownership interest in such facility be allocated to such persons for purposes of § 45Z(f)(2)? Should rules similar to the rules under § 45(e)(3) apply for this purpose? If so, which aspects of § 45(e)(3) should apply without modification for this purpose and which aspects should be modified?

Production from a qualifying facility with more than one person having an ownership interest should be allocated according to % ownership interest or other basis as determined and agreed upon by parties with ownership interest.

• Other topics related to 45Z credit that may require guidance

Treasury should provide clarity around definition of transportation fuel, particularly respecting the phrase "suitable for use as fuel in highway vehicles. "It should also provide clarity on the process to be followed for public comment and rulemaking between now and implementation

- III. Response to Notice 2022-57 (Request for Comments on the Credit for Carbon Oxide Sequestration)
 - A. General Request for Comments. The Treasury Department and the IRS request comments on questions arising from the IRA amendments to § 45Q that should be addressed in guidance.

ACC requests that clarity be provided regarding the restriction on stacking of the 45Q credit and the section 45V credit applies to different manufacturing operations, product lines, or facilities within a larger chemical manufacturing plant. As noted in Section II above, language in the IRA presumed that all qualified clean hydrogen production facilities would be standalone facilities.



IV. Conclusion

Thank you again for the opportunity to provide these initial comments and questions on the notices. We hope this can become the start of an ongoing dialogue between Treasury and IRS staff and the chemical industry on implementation of these critical industrial emissions reduction incentives. If you have any questions or would like more information on our industry and the role these tax incentives will play in our members' emissions reduction efforts, please feel free to contact me.

Sincerely,

Kimberly Wise White, Ph.D.

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Vice President, Regulatory and Scientific Affairs

Attachment: Exhibit A





November 4, 2022

To: Hon. Charles B. Retting, Commissioner

Internal Revenue Service Department of the Treasury

Re: Response of the American Chemistry Council ("ACC") to Requests for Comment Nos.

Notice 2022-46, Notice 2022-47; Notice 2022-48, Notice 2022-49, Notice 2022-50, and

Notice 2022-51

Submitted via: www.regulations.gov

Dear Commissioner Retting:

On behalf of the American Chemistry Council and its members, I am pleased to submit comments in response to the six notices issued by the Department of Treasury (Treasury) and the Internal Revenue Service (IRS) on October 5, 2022. The historic energy and manufacturing innovation incentives and infrastructure investments contained in the Inflation Reduction Act (IRA) and 2021 Bipartisan Infrastructure Legislation (BIL) have the potential to reshape the U.S. economy and move the Nation toward a lower emissions future. To unlock the potential of these laws, policymakers, businesses, and the citizenry now must work together to advance rather than impede rapid implementation.

ACC represents a diverse set of companies engaged in the business of chemistry, an innovative, \$486 billion enterprise. <u>ACC members</u> work to solve some of the biggest challenges facing our Nation and our world, driving innovation through investments in research and development (R&D) that exceed \$10 billion annually. They supply the chemical products, polymers, and materials underpinning the energy sector's industrial base and the energy efficiency, clean energy, and clean energy-enabling technologies needed for a low-carbon economy.

Our members are also taking action to reduce the industrial greenhouse gas (GHG) intensity of their own supply chains, operations, and products, making them essential partners in IRA implementation. The sector's greenhouse gas carbon mitigation strategy includes consideration of a broad range of emissions sources and sinks, including upstream fuel and feedstock emissions, manufacturing process emissions, energy emissions from heat and power, avoided carbon during the use phase, and both emissions and mitigation during the end-of-life and recycling phase. Each point in the lifecycle raises novel technology challenges. Moreover, even where technologies have been demonstrated for a particular application or industrial segment, translation and validation of that technology at commercial scale may be costly, time consuming, and risky.



The IRA tax incentives could provide an early and essential foundation for action by chemical manufacturers and other energy intensive, trade-exposed, and hard-to abate industries – if implemented in a clear, pragmatic, and constructive manner. We applaud the commitment of the Treasury Department and the IRS for a focusing on the principles of "robust public engagement," "clarity and certainty," and "sound stewardship" throughout the implementation process. ACC urges Treasury to consider three additional guiding principles: "supply chain perspective," "policy alignment," and "capacity building."

Supply chain perspective: While many vital lower-emissions energy and manufacturing solutions are progressing toward or have reached early-stage commercial-scale viability, continued federal support for innovation is needed to increase the efficacy, efficiency, reliability, and cost-effectiveness of the applied technologies and the enabling equipment, components, materials, and chemistries within their supply chains. This requires a broad, inclusive interpretation of which types of facilities, technologies, components, and materials qualify for federal incentives. Narrow interpretation and qualification for federal incentives could result in supply chain bottlenecks between suppliers to the renewable energy industry and those within the industry producing renewable energy products and/or technologies.

Policy Alignment: IRA tax credits and funding provide powerful incentives for innovation and technology deployment – provided federal regulatory policy supports these objectives. ACC urges the Treasury Department and IRS to work with DOE, EPA, and other agencies to reduce barriers and ensure the regulatory process supports the continued innovation and deployment of lower emissions technologies, products, and projects. This includes using science and best available information to support a risk-based review and approval process under the Toxic Substances Control Act for the myriad of new and existing chemistries used within energy and manufacturing supply chains, and working to expedite the project siting and permitting processes using transparent, objective and fact-based approaches to deploy lower emissions solutions.

Capacity Building: A necessary predicate to the economic and climate transformation sought through the IRA is rapid and broad expansion of the Nation's clean energy, manufacturing, and transportation infrastructure linking suppliers, manufacturers, and users. Guidance should recognize these linkages and account for the time and incremental adjustment needed for this infrastructure build-out when establishing or interpreting dates, milestones, and deadlines for qualifying projects.

I. Industry Priorities for Tax Credit Guidance and Implementation.

The business of chemistry touches and is touched by almost every sector of the economy, either directly or through its upstream and downstream supply chain. The diversity of the industry also means that different members have different tax credit priorities, depending on their supply chains, manufacturing processes, product markets, and financial structures. In short, while certain IRA tax credits have generated particular attention within our membership (e.g., 45V, 45X, 48, and 48C, 179), all the IRA's tax credits will provide support, either directly or indirectly, to the chemical industry's (and broader economy's) transition towards a lower-emissions future.



For this initial prioritization exercise, below are some specific areas where members have raised specific questions or comments for consideration.

II. IRS RFI on Consumer Vehicle Tax Credits

A. 30D Clean Vehicles Credit

- 1. Please provide additional guidance on the minimum amount of critical mineral allowed to be sourced from the United States, Free Trade Agreement countries or recycled, including how to determine the value.
- 2. Please confirm that battery system and assembly materials are included in the scope of "components" of a battery. Some system material components, especially those that mitigate fires or that are used for thermal management, are critical to a battery's safety performance. Global manufacturing capacity for those materials is already limited and the current rate of investment in new capacity might not be sufficient to meet the demand projected from new battery capacity coming online. Those components, while representing only a small fraction of a battery's bill of material costs, are critical to its safety and performance.

III. RFI on Tax Incentives for Homes/Buildings

B. 179D Energy Efficient Commercial Buildings Deduction

- 1. 179D(1) the "person primarily responsible" should be defined as a currently licensed engineer in the state in which the project is located. Their professional seal with signature and date should be affixed to the engineering documents produced.
- 2. Section 179D(h)(1) requires that regulations are promulgated to take into account new technologies regarding energy efficiency and renewable energy for purposes of determining energy efficiency and savings under Section 179D. In such regulations, energy efficiency and savings should include any energy that is made by renewable energy sources that is fully consumed on the site in which it is produced.
- 3. Section 179D requires that a qualified professional must prepare a qualified retrofit plan. The statute defines qualified professional as "an individual who is a licensed architect or a licensed engineer and meets such other requirements as the Secretary may provide." The only additional requirement that should be provided is a requirement that the license is obtained in the state in which the project is located.



- 4. With respect to a qualified retrofit plan, please provide guidance on how the 25% energy use intensity requirement is defined and measured.
- 5. Please clarify whether a "qualified professional" can be a project's Engineer-of-Record, or whether it must be a 3rd party hired specifically for this qualification.

IV. RFI on Manufacturing Tax Credits

A. The 45X Advanced Manufacturing Production Credit

- 1. Please confirm and clarify that the term "cathode materials" in the definition of electrode active material expressly includes the Polyvinylidene fluoride (PVDF) binder that is in the cathode.
- 2. Section 45X(b)(1)(M) states the credit amount is "in the case of any applicable critical mineral, an amount equal to 10 percent of the costs incurred by the taxpayer with respect to production of such mineral." Please clarify whether the cost of producing chemicals/technologies sold specifically for purposes of critical mineral extraction are eligible for this credit.
- 3. Under 45X(b), the Advanced Manufacturing Credit equals the sum of credit amounts with respect to each eligible component produced by the Taxpayer and sold to an unrelated party. The "eligible components" are solar, wind, inverter, qualifying battery component, and "applicable critical mineral." Please confirm that "applicable critical mineral" includes minerals used both in the production of durable rotor blades and in the operation of wind turbines.

B. The 48C Qualifying Advanced Energy Project Credit

- 1. Please provide additional guidance on determining compliance with the requirement for a 20 percent reduction of GHG footprint under Section 48C(c)(1)(A)(ii). What are acceptable methods for setting baseline emissions?
- 2. Section 48C(c)(1)(A)(i)(IX) references "other advanced energy property designed to reduce greenhouse gas emissions as may be determined by the Secretary." Section 48C(c)(1)(A)(ii)(IV) references "any other industrial technology designed to reduce greenhouse gas emissions, as determined by the Secretary." Please confirm and clarify that property and technology "designed to reduce greenhouse gas emissions" includes water conservation property and technologies, as studies have shown water conservation is one of the most effective practices for reducing greenhouse gas emissions.



V. RFI on Energy Generation Tax Credits

C. The Energy Investment Credit (§ 48)

- 1. Comments were requested on whether guidance is needed to determine whether an investment credit facility that elects to claim the Section 48 investment tax credit in lieu of the Section 45 production tax credit is subject to all of the requirement of Section 45. We request that guidance makes clear that an investment credit facility claiming the Section 48 investment tax credit need not meet all requirements of the Section 45 production tax credit, particularly a requirement that the sale of electricity generated from must be sold to an unrelated third party. Such a requirement would severely limit the utility of changes to Section 48.
- 2. In interpreting Section 48(a)(3)(A)(i) that energy property includes "equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, guidance should ensure that the term applies to waste energy recovery sites, including buildings, warehouses, or other uses that result in offsetting the use of other energy sources.
- 3. Treasury and IRS should ensure that determinations of what types of technologies are covered under Section 48, including expanded definitions of energy property, encompass: solar technologies; geothermal systems, microturbines, combined heat and power; waste energy recover systems to include those generating electricity or used to heat or cool structures; energy storage systems, both paired with generation and installed as a stand-alone system; thermal energy storage systems; interconnection equipment; and any other technology that utilizes waste energy sources to generate or offset the consumption.

Please clarify whether investments needed to retrofit facilities to enable use of renewable energy generating equipment and reduced greenhouse gas emitting equipment is includible in the basis of qualified property for purposes of calculating the credit under Section 48. For example, investments can be needed to enable facilities to handle the electric capacity needed to transition away from use of GHG emitting equipment (*i.e.*, use of electric boilers to displace use of natural gas boilers). While these transitions reduce the emission of GHGs, they result in greater electric load capacity needs to operate facilities. The investment in electric infrastructure, both internally within the building and externally for grid connectivity is needed to facilitate such transition.



VI. RFI on Credit Enhancement Provisions

1. Extended Comment Period

ACC respectfully requests that Treasury continue to consider - and make clear that it will consider - comments received by stakeholders after the expiration of the official thirty-day window provided in the notices. Such consideration is warranted in light of the significant implications the IRA will have on the construction, repair, and maintenance of our members' facilities. These implications will vary significantly across our members, depending on their location, facility type and size, and the nature of the potential projects they are considering. As such, additional time is needed, even for initial comments and questions to inform the implementation process.

2. Prevailing Wage and Apprenticeship Requirement

- a. Please provide clarification around what constitutes reasonable practice and efforts for monitoring subcontractor compliance with prevailing wage and apprenticeship requirements.
- b. Please clarify what constitutes "best efforts" to comply with prevailing wage and apprenticeship requirements in cases where limitations on availability of qualified workforce or safety concerns prevent reasonable compliance.

3. Domestic Content Requirements

c. Please clarify how this requirement would apply as it relates to steel, iron and other manufactured products. Such clarification must include a definition of manufactured products, how to determine their value, and how to evaluate the domestic content when manufactured products are comprised of components and possibly sub-components.

4. The 45V Hydrogen Production Credit.

a. Our members are currently reviewing the GREET model and would appreciate the opportunity to engage with Treasury staff further in the development of guidance governing its use.

Thank you again for the opportunity to provide these initial comments and questions on the notices. We hope this can become the start of an ongoing dialogue between Treasury and IRS staff and the chemical industry on implementation of these critical industrial emissions reduction incentives. If you have any questions or would like more information on our industry and the role these tax incentives will play in our members' emissions reduction efforts, please free to contact me.



Sincerely,

Kimberly Wise White

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Vice President, Regulatory and Scientific Affairs

