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Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-56), Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044
December 3, 2022

Re: Notice 2022-56 (Request for Comments on Section 45W Credit for Qualified Commercial Clean Vehicles and Section 30C Alternative Fuel Vehicle Refueling Property Credit)

To Whom It May Concern:

Advanced Energy Economy (“AEE”) respectfully submits the comments herein in response to 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 “Notice”). We continue to appreciate the work of the staff at the Internal Revenue Service (“IRS”) to issue the Notice and prioritize guidance that will facilitate broad use of the clean vehicle tax credits authorized and extended in the Inflation Reduction Act of 2022 (the “IRA”). We further appreciate the work of the staff of other federal agencies and administration officials specialized in clean energy finance and development to support the IRS’s vital IRA implementation work.

In these comments, we request guidance and make recommendations on specific matters and questions contained in the Notice. In preparation for submitting these comments, we worked with AEE members to learn the most critical open questions to address for these two credits. The views and requests for clarification expressed below are broadly representative of our membership as a whole, but should not be interpreted as the view of any individual member company.

We appreciate your consideration of the recommendations discussed below and look forward to the issuance of proposed regulations and other guidance that will facilitate much-needed investment in zero-emission transportation and advance the IRA’s objectives of promoting high-paying domestic clean energy jobs. If you have any questions, please do not hesitate to contact us at rgallentine@aee.net.

Sincerely,
Ryan Gallentine
Advanced Energy Economy

Responses to Specific Questions in the Notice and Related Comments

Request for Comments on Credit for Qualified Commercial Clean Vehicles (§ 45W)

(1) What factors should be considered, and what data sources should be relied on, to determine whether a vehicle is “comparable in size and use” for purposes of the comparable vehicle definition in § 45W(b)(3) to determine incremental cost?

Because incremental cost between “comparable vehicles” of different drivetrain technologies is inherently a varying value as technology evolves, some care must be taken to ensure the available credit is both accurate and easily determined. One way to arrive at this anchor price is by using a blended average of sales prices from a given year within each vehicle type for traditional combustion vehicles. Once this anchor price is established each year, it can serve as the basis for the incremental cost of the commercial clean vehicle. In this circumstance, we respectfully recommend ensuring that the vehicle’s model year should be compared specifically to the tax year in which it was manufactured rather than sold for simplicity and industry predictability.

This mechanism would have the added benefit of retaining larger incremental costs in vehicle types which remain hardest to eliminate emissions from, while sunseting sectors where the market has created a preference for cleaner and more advanced models.

Alternatively, Treasury could allow for a key vehicle specification when determining comparable vehicles (e.g., GVWR and range) given that many companies order custom-built vehicles to meet their operational needs, which may not be easily comparable to mass market models. Under this method, Treasury should clarify that special pricing (i.e., volume discounts, costs for custom design, etc.) be applied consistently between the actual cost of a QCCV and the cost of a comparable vehicle, versus comparing to a vehicle’s MSRP.

(3) Section 45W(d)(1) provides that rules similar to the rules under § 30D(f) without regard to the income limitations in § 30D(f)(10) or the manufacturer’s suggested retail price limitations in § 30D(f)(11), apply for purposes of section 45W. The applicable rules in § 30D(f) are basis reduction, no double benefit, property used outside the United States not qualified, recapture, election not to take the credit, interaction with air quality and motor vehicle safety standards, and one credit per vehicle. What aspects of § 30D(f) should apply to the § 45W credit without modification and what aspects should be modified?

AEE respectfully requests that two clarifications are made in forthcoming guidance with respect to Section 30D(f)(4), limitations for property used outside the United States, and Section 30D(f)(5), recapture rules.

Regarding Section 30D(f)(4), as Section 45W is a new credit designed for commercial fleet electrification, AEE respectfully requests that the Department of the Treasury (“Treasury”) adopt guidance that commercial clean vehicles can make extended trips to and from Mexico and Canada for business purposes while still qualifying for the Section 45W credit. Specifically, Section 30D(f)(4) provides that no credit is allowed under that section for property that is “used predominantly outside the United States” under Section 50(b)(1)(A). However, Section



50(b)(1)(A), by cross reference to Section 168(g)(4), provides several classes of property that are exempt from this requirement. For example, motor vehicles of U.S. persons operated to and from the United States are exempt from this limitation.¹ We request that the regulations expressly incorporate this exception for purposes of Section 45W. Further, Treasury Regulations Section 1.48-1(g)(1)(i) provides (for purposes of the Section 48 investment tax credit) that property is used predominantly outside the United States if it is physically located outside the United States more than half the time in a given taxable year, or more than half the time from the date it is placed in service until the end of the taxable year. We request that this standard be made expressly applicable to Section 45W, to the extent the above exception does not apply to a qualified clean commercial vehicle.

With respect to Section 30D(f)(5), AEE respectfully requests that Treasury explicitly define the scope of the recapture rules that will apply to Section 45W by reason of Section 30D. Section 30D(f)(5) provides that “[t]he Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any property which ceases to be property eligible for such credit.” To date, Treasury has not issued any regulations under Section 30D. However, regulations under former Section 30, the precursor statute to Section 30D, provides a 3-year recapture rule. Specifically, Treasury Regulations Section 1.30-1(b)(2) provides that a recapture event occurs if, “within 3 full years from the date a qualified electric vehicle is placed in service, the vehicle ceases to be a qualified electric vehicle.” A vehicle ceases to be a qualified electric vehicle if: (1) “the vehicle is modified so that it is no longer primarily powered by electricity”; (2) “the vehicle is used in a manner described in section 50(b)”; or (3) the taxpayer receiving the credit sells or disposes of the vehicle and either knows or has reason to know that the vehicle will be used in a manner described in (1) or (2). Treasury Regulations Section 1.30-1(b)(3)-(6) provide the operative rules for determining the recapture amount, recapture date, recapture percentage, and basis adjustments. To avoid possible confusion, Treasury should incorporate recapture rules directly into the Section 45W regulations and provide rules for when a qualified commercial clean vehicle ceases to meet the requirements of Section 45W(c).

(4) Section 45W(d)(3) provides that no § 45W credit is allowed with respect to any vehicle for which a credit was allowed under § 30D. What, if any, guidance is required to ensure that the allowance of credit under § 30D precludes the allowance of a credit under § 45W for the same vehicle?

AEE recommends that guidance be established to require qualified manufacturers to provide VIN information into a central database to prevent double counting. Such a database should also be used to track requirements for collection of 25E Used EV tax credits. Because vehicles eligible for 45W credit are not subject to the same eligibility restrictions of 30D and the two credit amounts are calculated differently, we advise Treasury to also establish a clear process for individuals to apply the correct credit whether it is for personal or commercial use.

(5) The definition of qualified commercial clean vehicle in § 45W(c)(1) contains several requirements including that the vehicle be made by a qualified manufacturer as required by §

¹ IRC Section 168(g)(4)(D).



30D(d)(1)(C), as amended by the IRA. What, if any, guidance is necessary for qualified manufacturers to comply with the requirements of § 45W(c)(1)?

As we note elsewhere in our comments, wherever possible AEE and its' member companies support consistent standards and definitions with respect to guidance around the programs and provisions of the IRA in order to speed implementation of the law and avoid administrative complexity. In that vein, we would encourage Treasury to consider manufacturers who meet the definition of a "qualified manufacturer" under [30D\(d\)\(3\)](#), as referenced in 30D(d)(1)(C), to also be considered qualified manufacturers for the purposes of 45W. That said, there may also be manufacturers who meet the qualifications for 45W but not 30D. In light of that, we would likewise encourage Treasury to provide guidance for manufacturers regarding how they may qualify for under 45W if they are not already qualified under 30D.

We would urge Treasury to utilize the same compliance methodology developed for qualified manufacturers under 30D in the application of 45W as well. Qualified manufacturers should be able to provide the Vehicle Identification Numbers (VIN) to Treasury to enable tracking and effectuate compliance. We would encourage Treasury to limit requests for additional information beyond such VINs from qualified manufacturers in order to limit the administrative burden on all parties. We would recommend that any guidance provided by Treasury clearly enumerate the use of VINs and any additional vehicle information.

(6) Section 45W(c)(3)(A) requires that a qualified commercial clean vehicle must either (i) satisfy the requirements under § 30B(b)(3)(A) and (B) for being a new qualified fuel cell motor vehicle, or (ii) be propelled to a significant extent by an electric motor which draws electricity from a battery that has a capacity of not less than 15 kilowatt hours (or, in the case of a vehicle which has a gross vehicle weight rating of less than 14,000 pounds, 7 kilowatt hours) and is capable of being recharged from an external source of electricity. How should "significant extent" be defined for this purpose?

AEE believes the statutory intent of the 45W credit is to incentivize clean vehicles, which should mean emissions-free vehicles. While hybrid electric/combustion vehicles currently serve a technology bridge (primarily in the light-duty sector), market trends clearly indicate a single drivetrain is the most likely long-term product offering. Thus, we believe defining "significant extent" as a number less than 100% invites unnecessary administrative complexities. If such an exemptive definition is made, we recommend limiting eligible emitting fuel sources to true emergency backup situations, not to exceed 10% of the total range of the vehicle.

(8) Please provide comments on any other terms in § 45W that may require definition or additional guidance.

Section 45W(d)(2) states that "subsection (c)(4) shall not apply to any vehicle...which is placed in service by a tax-exempt entity described in clause (i), (ii), or (iv) of section 168(h)(2)(A)." It is clear from this language that Congress intended for the 45W credit to be usable by state and local governments, tribal governments, and nonprofits. Section 6417 also makes it clear that such entities would be able to elect to treat the 45W credit as a direct payment. We urge Treasury to make this eligible use of the credit explicitly clear in any guidance issued.



Request for Comment on Alternative Fuel Vehicle Refueling Property Credit (§ 30C)

(2) Section 30C(b) provides that the credit is allowed with respect to any single item of qualified alternative fuel vehicle refueling property. How should “single item” be defined for this purpose?

AEE respectfully requests that “single item” be defined by borrowing the concepts set forth in analogous rules underlying the “functional interdependence test” under Internal Revenue Code Section 263 and the Treasury Regulations thereunder. AEE believes that this reading is both reflective of Congressional intent to significantly expand the credit cap to \$100,000 for qualifying businesses and is a practical approach to applying similar concepts for purposes of Section 30C. Further, AEE respectfully requests that guidance clarify that installation labor costs associated with a “single item” can be capitalized into the cost of components of a “single item” to calculate the cost basis under Section 30C(a) and for depreciation purposes.

First, the Inflation Reduction Act (“IRA”)² modifications to Section 30C, introducing a \$100,000 *per-item* cap over a single location, is structurally different and reflects a substantial increase to the credit over the \$30,000 cap previously in place. Notably, most charging stations, even Level 3 EVSE DC Fast Charging stations, typically average far below \$100,000 per charger. Further, the capital and operating expenses of various chargers are not uniform; for example, DC fast chargers often have higher civil engineering and construction costs relative to the charger unit than other types of chargers, such as fleet AC or public chargers.³ Taken together, these modifications enacted by the IRA reflect a Congressional intent to make this credit more broadly applicable and scalable to the significant capital expenditures related to installing charging stations. In other words, if “single item” were to *only* include the charging unit itself, the \$100,000 per-item cap would be effectively meaningless as there are virtually no chargers that retail for this amount, and, it would ignore the significant capital costs that are essential to installing, electrifying, and scaling charging stations.

As such, AEE believes that Treasury Regulations under Section 263 provide helpful parameters for determining what is a “single item” of property for purposes of Section 30C, such that a broader set of eligible property is considered as a “single item,” thereby ensuring that the \$100,000 cap is practicable. Under Treasury Regulations Section 1.263(a)-2(e)(3), the term “unit of property,” an analogous term, is used to determine what costs with respect to property must be capitalized and what costs may be deducted currently. In developing these regulations, the Treasury Department noted that one of the relevant factors should be “whether the property serves a discrete purpose or functions independently from a larger assembly.”⁴ Under these regulations, units of property are identified using a “functional interdependence” standard, under which all “components that are functionally interdependent comprise a single unit of property.” Components are functionally interdependent “if the placing in service of one component by the taxpayer is dependent on the placing in service of the other component by

² Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (August 16, 2022) (codified as amended in scatter sections across multiple U.S.C. titles).

³ See *e.g.*, Zealan Hoover *et al.*, *How charging in buildings can power up the electric-vehicle industry*, MCKINSEY & COMPANY (January 5, 2021), <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/how-charging-in-buildings-can-power-up-the-electric-vehicle-industry>

⁴ See Notice 2004-6, 2004-3 I.R.B. 308.



the taxpayer.”⁵ For example, the regulations provide that all of the components of a railroad locomotive, including the engine, generators, batteries, and trucks, are functionally interdependent and are treated as a single unit of property.⁶ Further, improvements to any unit of property should be treated as part of the unit of property being improved.⁷

As applied to Section 30C, we respectfully request that all equipment required to energize a single port to charge one electric vehicle should be considered “functionally interdependent” and treated as a “single item” in a similar fashion to how this standard is applied to “units of property.” Further, we respectfully request that charging site hardware, electrical upgrades (including make ready costs), EV charging software, and other physical items that are functionally interdependent to electrifying a charging port are included as “components” or a similar concept in such a definition in broad categories. Relatedly, as is permitted generally, we request that guidance clarify that installation labor costs may be capitalized into the cost of the components that are treated as “functionally interdependent” for depreciation purposes.

As the hardware and technology in EV charging are rapidly evolving, configurations and customizations to individual site locations will be necessary and benefit from a flexible definition like applying the “functionally interdependent” standard with broad component categorizations of required capital costs and installation labor. Furthermore, as many programs across both the IRA and the Infrastructure Investment and Jobs Act (“IIJA”)⁸ include direct subsidies or grants to deploy EV charging, a flexible definition will help ensure that eligible entities, particularly public and non-profit entities, can maximize the public benefit of Section 30C along with other non-tax IRA and IIJA programs.

For example, a school district can apply to receive a rebate or grant from the Environmental Protection Agency (“EPA”) under the Clean School Bus Program, authorized under the IIJA, to defray the costs of purchasing *both* an EV bus and the associated charging infrastructure. The Clean School Bus Program has \$5 billion appropriated to it, and the EPA is currently administering a public input process to determine how best to administer rebates and grants going forward after the first \$1 billion in awards were announced in fall of 2022.⁸ With flexibility in the definition of “single item” for Section 30C, this will provide the school district with assurances that however the ultimate charging infrastructure is designed and installed in conjunction with their local utility, the school district will be able to claim the Section 30C credit to the fullest extent possible. As a result, that school district can then draft its EPA grant or rebate application to be primarily allocated to subsidizing the cost of purchasing the EV bus and not be forced to split the money across the bus and the charging equipment. In this way, both the intended outcomes of the tax credit regime and direct federal awards are maximized for public benefit, allowing the EPA to distribute more funds to school districts to deploy EV school buses. Finally, this approach has the benefit of encouraging EV charging site designers to account for the full project size and optimize total charging ports with expected utilization more closely.

⁵ See Treas. Reg. Sec. 1.263(a)-3(e)(3)(i).

⁶ See Treas. Reg. Sec. 1.263(a)-3(e)(3)(i).

⁷ Treas. Reg. Sec. 1.263(a)-3(e)(4).

⁸ Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, Div. J, 135 Stat. 1350 (November 15, 2021).



(3) Section 30C(c)(2) provides that property does not fail to be qualified alternative fuel vehicle refueling property solely because such property is capable of charging the battery of a motor vehicle propelled by electricity, and allows discharging electricity from such battery to an electric load external to such motor vehicle. What factors and definitions should be considered in developing guidance for qualified alternative fuel vehicle refueling property that is also bidirectional charging equipment?

AEE supports the eligibility of bidirectional charging equipment for the 30C tax credit. Vehicle-to-grid technology has the potential to unlock the energy storage capabilities of EVs, providing additional resilience, reliability, and ancillary services and further enhancing the value proposition of EVs and fleets. In the development of guidance with respect to Section 30C, we would encourage Treasury to ensure that the rules and regulations it stipulates do not *exclude* bidirectional charging equipment. To that end, Treasury should consider all applicable charging use cases in the development of guidance and should consider various hardware configurations that might be required to enable such bidirectional charging in its definition of a “single item.” Provided such equipment can demonstrate that it has the capability to provide vehicle charging, we would encourage Treasury to explicitly confirm that all equipment that comprises a bi-directional charger, including that utilized to provide power to the grid and/or provide back-up to a building or facility, is eligible for the full amount of the available credit.

(4) Section 30C(e)(3) requires qualified alternative fuel vehicle refueling property to be placed in service in an eligible census tract. What guidance, if any, is needed to clarify the definition of eligible census tract?

We encourage Treasury to define “eligible census tract” as broadly as possible in order to allow for maximal deployment in the communities that are clearly intended to be targeted, including non-attainment areas, disadvantaged communities, and underserved populations. We also urge Treasury to clarify which census tract is considered the eligible tract if the installed infrastructure is used to charge vehicles that serve multiple tracts or areas, such as a school district served by a single bus depot.

Guidance issued should also accommodate for uncertainty around the changing definition of urban areas and clarify how a census tract that contains both urban and rural block groups will be handled. Section 30C, as revised, defines “eligible census tracts” as “as any census tract which (I) is described in § 45D(e), or (II) is not an urban area.” To identify what is “not an urban area,” Section 30C defines an “urban area” as “a census tract (as defined by the Bureau of the Census) which, according to the most recent decennial census, has been designated as an urban area by the Secretary of Commerce.”

The Census Bureau designates census blocks as urban or rural, not tracts. There are typically 100 or more blocks in any given census tract. Accordingly, Treasury will need to adopt a methodology for determining which census tracts should be classified as “urban” based on census block data in order to determine which tracts are “not urban.” Ideally, this methodology will provide a clear standard for how many “not urban” blocks a tract can contain and still be considered “urban”. This methodology will significantly impact how many taxpayers can access the tax credit.



We also encourage Treasury to ensure that an installation that meets census tract eligibility at a defined point during the project development process be considered eligible even if eligibility subsequently changes prior to filing the tax return. This is especially relevant given the present state of the EV infrastructure supply chain and the amount of time it can take to fulfill an order. If a project is eligible for the 30C tax credit at the time the project developer executes a purchase order, but then becomes ineligible in the subsequent months or years before the project is completed and the project developer files the tax return, it could undermine the project's financial viability. This unwelcome uncertainty would run counter to Congress' intent to incentivize widespread expansion of EV charging and provide long-term predictability to market participants.

Finally, we recommend that Treasury create a single publicly accessible list of eligible census tracts and a website with an interactive map or tool that allows individuals to search by address to determine eligibility. For census tracts that are eligible because they meet the definition of a low-income community described in Section 45D(e), we recommend that Treasury make explicit that the current definition applies until new tracts eligible for the New Market Tax Credit are released, with a 45-day transition period to the new census tracts.

(6) Please provide comments on any other terms in, or topics related to, § 30C that may require definition or guidance.

AEE welcomes and supports the inclusion of “transferability” within the Inflation Reduction Act, and the inclusion of Section 30C under those incentives eligible for transfer. Given the novelty of this provision, we would encourage Treasury to provide any additional guidance on how new transferability provisions applicable to 30C will work in practice, particularly for tax exempt entities, such as state and local governments, and whether 30C transferability will vary materially from the other applicable incentives under IRA.

