

**DEPARTMENT OF THE TREASURY****Internal Revenue Service****26 CFR Part 1****[REG–123525–23]****RIN 1545–BR06****Section 45W Credit for Qualified Commercial Clean Vehicles****AGENCY:** Internal Revenue Service (IRS), Treasury.**ACTION:** Notice of proposed rulemaking and notice of public hearing.

**SUMMARY:** This document contains proposed regulations that would provide guidance on the qualified commercial clean vehicle credit enacted by the Inflation Reduction Act of 2022. These proposed regulations would affect eligible taxpayers that place a qualified commercial clean vehicle in service during a taxable year. These proposed regulations would also affect manufacturers of qualified commercial clean vehicles.

**DATES:** Written or electronic comments must be received by March 17, 2025.

The public hearing on these proposed regulations is scheduled for April 28, 2025, at 10 a.m. eastern standard time (EST). Requests to speak and outlines of topics to be discussed at the public hearing must be received by March 17, 2025. If no outlines are received by March 17, 2025, the public hearing will be cancelled.

**ADDRESSES:** Commenters are strongly encouraged to submit public comments electronically via the Federal eRulemaking Portal at <https://www.regulations.gov> (indicate IRS and REG–123525–23) by following the online instructions for submitting comments. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn. The Department of the Treasury (Treasury Department) and the IRS will publish for public availability any comments submitted to the IRS's public docket. Send paper submissions to: CC:PA:01:PR (REG–123525–23), Room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044.

**FOR FURTHER INFORMATION CONTACT:** Concerning the proposed regulations, David Villagrana or Rika Valdman at (202) 317–6853 (not a toll-free number); concerning submissions of comments or the public hearing, Publications and Regulations Section at (202) 317–6901 (not a toll-free number) or by email at [publichearings@irs.gov](mailto:publichearings@irs.gov) (preferred).

**SUPPLEMENTARY INFORMATION:****Authority**

This document contains proposed amendments to the Income Tax Regulations (26 CFR part 1) regarding sections 25E, 30D, 45W, and 6417 of the Internal Revenue Code (Code) as they relate to the credit for qualified commercial clean vehicles (proposed regulations). The proposed regulations are issued by the Secretary of the Treasury or her delegate (Secretary) under the authority granted by sections 25E(e), 30D(d)(3) and (f)(5), 45W(c)(1), (d)(1), and (f), 6417(h), and 7805(a) of the Code.

Section 45W(f) provides an express delegation authorizing the Secretary to issue “such regulations or other guidance as the Secretary determines necessary to carry out the purposes of this section, including regulations or other guidance relating to determination of the incremental cost of any qualified commercial clean vehicle.”

Section 45W(c)(1), in part, incorporates in the definition of the term “qualified commercial clean vehicle” that the vehicle “meets the requirements of section 30D(d)(1)(C).” Section 30D(d)(1)(C) requires that such vehicle be made by a “qualified manufacturer,” as defined in section 30D(d)(3). Section 30D(d)(3) provides that a qualified manufacturer must enter “into a written agreement with the Secretary under which such manufacturer agrees to make periodic written reports to the Secretary (at such times and in such manner as the Secretary may provide) providing vehicle identification numbers and such other information related to each vehicle manufactured by such manufacturer as the Secretary may require.”

Section 45W(d)(1), which provides that rules similar to the rules under section 30D(f) (without regard to section 30D(f)(10) or (11)) apply for purposes of section 45W, incorporates section 30D(f)(5), which provides an express delegation of authority stating, “[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.”

Section 6417(h) authorizes the Secretary to issue such regulations or other guidance as may be necessary to carry out the purposes of section 6417.

Finally, section 7805(a) authorizes the Secretary “to prescribe all needful rules and regulations for the enforcement of [the Code], including all rules and regulations as may be necessary by reason of any alteration of law in relation to internal revenue.”

**Background***I. Overview*

Section 13403(a) of Public Law 117–169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA), added section 45W to the Code. Section 13403(b)(1) of the IRA added section 45W to the list of general business credits in section 38 of the Code. Section 45W provides a credit against the tax imposed by chapter 1 of the Code (chapter 1) with respect to each qualified commercial clean vehicle placed in service by the taxpayer during the taxable year (section 45W credit). The section 45W credit is effective for vehicles placed in service after December 31, 2022. The section 45W credit is one of three related clean vehicle credits enacted under or revised by the IRA. Section 25E provides a credit for previously-owned clean vehicles. Section 30D provides a credit for new clean vehicles.

*II. Section 45W*

Section 45W(a) provides that, for purposes of section 38, the qualified commercial clean vehicle credit for any taxable year is an amount equal to the sum of the credit amounts determined under section 45W(b) with respect to each qualified commercial clean vehicle placed in service by the taxpayer during the taxable year. The amount of the section 45W credit is treated as a general business credit. Section 38(b)(37) lists as a current year business credit the qualified commercial clean vehicle credit determined under section 45W.

Section 45W(b)(1) provides that, subject to the limitation in section 45W(b)(4), the amount of the section 45W credit is the lesser of: (A) 15 percent of the taxpayer's basis in the vehicle (30 percent in the case of a vehicle not powered by a gasoline or diesel internal combustion engine (ICE)), or (B) the incremental cost of the vehicle.

Section 45W(b)(2) provides that the incremental cost of any qualified commercial clean vehicle is an amount equal to the excess of the purchase price for such vehicle over the purchase price of a comparable vehicle. Section 45W(b)(3) defines “comparable vehicle” to mean, with respect to any qualified commercial clean vehicle, any vehicle that is powered solely by a gasoline or diesel ICE and is comparable in size and use to such vehicle.

Section 45W(b)(4) provides that the section 45W credit amount determined under section 45W(b) with respect to any qualified commercial clean vehicle

cannot exceed: (A) in the case of a vehicle that has a gross vehicle weight rating of less than 14,000 pounds, \$7,500; and (B) in the case of a vehicle not described in section 45W(b)(4)(A), \$40,000.

Section 45W(c) defines “qualified commercial clean vehicle” for purposes of the section 45W credit as any vehicle which: (1) meets the requirements of section 30D(d)(1)(C) of the Code, and is acquired for use or lease by the taxpayer and not for resale; (2) either meets the requirements of section 30D(d)(1)(D), and is manufactured primarily for use on public streets, roads, and highways (not including a vehicle operated exclusively on a rail or rails), or is mobile machinery, as defined in section 4053(8) of the Code (including vehicles that are not designed to perform a function of transporting a load over the public highways); (3) either is 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 that 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, or is a motor vehicle that satisfies the requirements under section 30B(b)(3)(A) and (B) of the Code; and (4) is of a character subject to the allowance for depreciation.

Section 45W(d) establishes special rules for purposes of the section 45W credit. Section 45W(d)(1) provides that rules similar to the rules of section 30D(f)(1) through (9) apply to section 45W. Section 45W(d)(2) provides that section 45W(c)(4) does not apply to any vehicle that is not subject to a lease and which is placed in service by a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv) of the Code. Section 45W(d)(3) provides that no section 45W credit is allowed with respect to any vehicle for which a credit was allowed under section 30D.

Section 45W(e) provides that no section 45W credit is allowed with respect to any vehicle unless the taxpayer includes the vehicle identification number of such vehicle on the return of tax for the taxable year.

Section 45W(f) grants the Secretary authority to issue regulations or other guidance to carry out the purposes of section 45W, including regulations or other guidance relating to the determination of the incremental cost of any qualified commercial clean vehicle.

Section 45W(g) provides that no section 45W credit is allowed with respect to a vehicle acquired after December 31, 2032.

### III. Section 25E

Section 13402 of the IRA added section 25E to the Code. The credit under section 25E (section 25E credit) is a personal credit allowable under subpart A of the Code that relates to previously-owned clean vehicles.

### IV. Section 30D

Section 30D was originally enacted by section 205(a) of the Energy Improvement and Extension Act of 2008, Division B of Public Law 110–343, 122 Stat. 3765, 3835 (October 3, 2008), to provide a credit for the purchase and placing in service of new qualified plug-in electric drive motor vehicles (section 30D credit). Section 30D was amended several times since its enactment, most recently by section 13401 of the IRA. Section 30D, as amended by the IRA, relates to new clean vehicles.

The section 30D credit may be treated as either a personal credit or a general business credit, depending on whether the vehicle is used for personal use or is of a character subject to the allowance for depreciation.

Section 30D(d)(1) defines “new clean vehicle” as a motor vehicle that satisfies eight requirements set forth in section 30D(d)(1)(A) through (H). As relevant to section 45W and these proposed regulations, section 30D(d)(1)(C) provides that the vehicle must be made by a qualified manufacturer, and section 30D(d)(1)(D) provides that the vehicle must be treated as a motor vehicle for purposes of title II of the Clean Air Act (CAA).

Section 30D(d)(3) defines “qualified manufacturer” as any manufacturer (within the meaning of the regulations prescribed by the Administrator of the Environmental Protection Agency (EPA) for purposes of the administration of title II of the CAA (42 U.S.C. 7521–7590)) that enters into a written agreement with the Secretary under which such manufacturer agrees to make periodic written reports to the Secretary (at such times and in such manner as the Secretary may provide) providing vehicle identification numbers and such other information related to each vehicle manufactured by such manufacturer as the Secretary may require.

Section 30D(f)(1)–(9) provides special rules for purposes of section 30D that are relevant to section 45W by virtue of the cross-reference in section 45W(d)(1). Section 30D(f)(1) provides that the basis of any property for which a credit is allowable under section 30D(a) is reduced by the amount of such credit so allowed (determined without regard to section 30D(c)).

Section 30D(f)(2) provides that the amount of any deduction or other credit allowable under chapter 1 for a vehicle for which a credit is allowable under section 30D(a) is reduced by the amount of credit allowed under section 30D(a) for such vehicle (determined without regard to section 30D(c)).

Section 30D(f)(3) provides that in the case of a vehicle the use of which is described in section 50(b)(3) or (4) of the Code (generally, use by tax-exempt organizations, the United States, a government entity, or foreign person or entities) and that is not subject to a lease, the person who sold such vehicle to the person or entity using such vehicle is treated as the taxpayer that placed such vehicle in service, but only if such person clearly discloses to such person or entity in a document the amount of any credit allowable under section 30D(a) with respect to such vehicle (determined without regard to section 30D(c)). Section 30D(f)(3) was repealed for vehicles placed in service after December 31, 2023.

Section 30D(f)(4) provides that no section 30D credit is allowable with respect to any property referred to in section 50(b)(1) (generally, property used predominantly outside of the United States).

Section 30D(f)(5) authorizes the Secretary to promulgate regulations providing for the recapture of the benefit of any section 30D credit allowable with respect to any property which ceases to be property eligible for such credit.

Section 30D(f)(6) provides that no section 30D credit is allowed for any vehicle if the taxpayer elects to not have section 30D apply to such vehicle.

Section 30D(f)(7) provides that a vehicle is not considered eligible for a section 30D credit unless such vehicle is in compliance with: (A) the applicable provisions of the CAA for the applicable make and model year of the vehicle (or applicable air quality provisions of State law in the case of a State which has adopted such provisions under a waiver under section 209(b) of the CAA), and (B) the motor vehicle safety provisions of 49 U.S.C. 30101 through 30169.

Section 30D(f)(8) provides that in the case of any vehicle, the credit described in section 30D(a) is only allowed once with respect to such vehicle, as determined based upon the vehicle identification number of such vehicle, including any vehicle with respect to which the taxpayer elects the application of section 30D(g).

Section 30D(f)(9) provides that no section 30D credit is allowed with respect to any vehicle unless the

taxpayer includes the vehicle identification number of such vehicle on the return of tax for the taxable year.

#### V. Section 6417

Section 6417 of the Code allows an applicable entity (as defined in section 6417(d)(1)(A)) to make an election with respect to an applicable credit (as defined in section 6417(b)) to be treated as making a payment against the tax imposed by subtitle A of the Code (related to income taxes) for the taxable year equal to the amount of such credit. Under section 6417(b)(6), in the case of a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv), the term “applicable credit” includes the section 45W credit determined under section 45W by reason of section 45W(d)(2).<sup>1</sup>

#### VI. Prior Guidance

##### A. Notice 2022–56

On November 3, 2022, the Treasury Department and the IRS published Notice 2022–56, 2022–47 I.R.B. 480, seeking comments regarding sections 45W and 30C of the Code. The notice requested general comments on issues arising under section 45W, as well as specific comments concerning: (1) factors to determine “comparable in size and use” for purposes of the comparable vehicle definition in section 45W(b)(3) used to determine incremental cost; (2) the definition of mobile machinery; (3) the application of “rules similar to the rules under section 30D(f)” to section 45W; (4) the “no double benefit” rule in section 45W(d)(3); (5) compliance considerations for qualified manufacturers; (6) the definition of “significant extent” for purposes of section 45W(c)(3)(A); (7) the term “property of a character subject to an allowance for depreciation” for purposes of section 45W(c)(4); and (8) other terms in section 45W that require definition or additional guidance.

The Treasury Department and the IRS received over 130 comments on Notice 2022–56. These comments were carefully considered in the preparation of these proposed regulations.

##### B. Revenue Procedures

On December 27, 2022, the Treasury Department and the IRS published Revenue Procedure 2022–42, 2022–52 I.R.B. 565. Among other things, Rev. Proc. 2022–42 provided guidance for qualified manufacturers to enter into

written agreements with the IRS, as required in sections 30D, 25E, and 45W, and to report certain information regarding vehicles produced by such manufacturers that may be eligible for credits under these sections.

On October 23, 2023, the Treasury Department and the IRS published Revenue Procedure 2023–33, 2023–43 I.R.B. 1135. Among other things, Rev. Proc. 2023–33 superseded certain provisions of Rev. Proc. 2022–42, and provided updated information on the submission of written agreements by manufacturers to the IRS in order to be considered qualified manufacturers, as well as updated information on the method of submission of monthly reports by qualified manufacturers.

On December 18, 2023, the Treasury Department and the IRS published Revenue Procedure 2023–38, 2023–51 I.R.B. 1544. Among other things, Rev. Proc. 2023–38 updated and consolidated the procedural rules for qualified manufacturers with respect to the section 25E credit, the section 30D credit, and the section 45W credit, and superseded certain provisions of Rev. Proc. 2022–42 and Rev. Proc. 2023–33.

##### C. Safe Harbor Notices

On January 17, 2023, the Treasury Department and the IRS published Notice 2023–9, 2023–3 I.R.B. 402, which provides a safe harbor for purposes of the section 45W credit regarding the incremental cost of certain qualified commercial clean vehicles placed in service in calendar year 2023, based on a December 2022 incremental cost analysis by the U.S. Department of Energy (DOE) across classes of street vehicles (DOE analysis).

On January 8, 2024, the Treasury Department and the IRS published Notice 2024–5, 2024–2 I.R.B. 347, which provides a safe harbor for the purposes of the section 45W credit regarding the incremental cost of certain qualified commercial clean vehicles placed in service in calendar year 2024. The safe harbor for 2024 is based on the DOE analysis, as amended by the DOE in December 2023 to incorporate minor modifications that did not alter the incremental cost results. Notice 2024–5 also requested comments regarding additional types or classes of vehicles that should be included in the safe harbor in the future. The Treasury Department and the IRS received comments in response to the Notice. These comments were carefully considered in the preparation of these proposed regulations.

D. Final Regulations Under Sections 25E, 30D, and 6213

On May 6, 2024, the Treasury Department and the IRS published final regulations (TD 9995) in the **Federal Register** (89 FR 37706) providing rules and definitions for the section 25E credit and the section 30D credit. In addition, the final regulations provide guidance under section 6213(g)(2)(T) through (V) of the Code on the meaning of “mathematical or clerical error” with regard to certain assessments of tax without a notice of deficiency in connection with the section 25E credit, the section 30D credit, and the section 45W credit.

#### Explanation of Provisions

##### I. Overview

Proposed § 1.45W–1 would provide definitions applicable to section 45W and the section 45W regulations. Proposed § 1.45W–2 would provide rules for determining the amount of the section 45W credit, including the determination of incremental cost for qualified commercial clean vehicles. Proposed § 1.45W–3 would provide rules related to a vehicle’s qualification as a qualified commercial clean vehicle. Proposed § 1.45W–4 would provide special rules relating to the credit eligibility of a vehicle involved in certain transactions and uses, the interaction of the section 45W credit with other credits, and recapture of the section 45W credit. Proposed § 1.45W–5 would provide reporting requirements for purposes of the section 45W credit.

##### II. Credit for Qualified Commercial Clean Vehicles; Definitions

Proposed § 1.45W–1 would provide definitions applicable to section 45W and the section 45W regulations.

##### A. Battery

Proposed § 1.45W–1(b)(1) would define the term “battery” to mean a collection of one or more battery modules, each of which has two or more battery cells, electrically configured in series or parallel, to create voltage or current. The term “battery” does not include items such as thermal management systems or other parts of a battery cell or module that do not directly contribute to the electrochemical storage of energy within the battery, such as battery cell cases, cans, or pouches. This definition is consistent with section 45W(c)(3)(A) because battery modules and cells are the sources from which an electric motor draws electricity. The definition is also consistent with the definition of battery in § 1.30D–2(b)(5).

<sup>1</sup> The reference in section 6417(b)(6) to section 45W(d)(3) was intended to be a reference to section 45W(d)(2). See General Explanation of Tax Legislation Enacted in the 117th Congress, JCS–1–23 (December 21, 2023) at 282. Thus, the proposed regulations refer to section 45W(d)(2). See also TD 9988, 89 FR 17546, at 17546 n.1.

#### B. Battery Electric Vehicle

Proposed § 1.45W–1(b)(2) would define the term “battery electric vehicle” (BEV) as a vehicle propelled solely by an electric motor that draws electricity from batteries capable of being recharged from an external source of electricity. This definition is consistent with section 45W(c)(3)(A), which requires, in part, that a qualified commercial clean vehicle be propelled to a significant extent by an electric motor that draws electricity from a battery.

#### C. Fuel Cell Electric Vehicle

Proposed § 1.45W–1(b)(3) would define “fuel cell electric vehicle” (FCEV) as a vehicle (i) that is propelled by power derived from one or more cells that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel which is stored on board the vehicle in any form and may or may not require reformation prior to use, and (ii) that, in the case of a light duty vehicle (that is, a passenger automobile or light truck), has received on or after August 8, 2005 (the date of the enactment of section 30B), a certificate that such vehicle meets or exceeds the Bin 5 Tier II emission level established in regulations prescribed by the Administrator of the Environmental Protection Agency (EPA) under section 202(i) of the CAA for that make and model year vehicle. This definition repeats the substance of section 30B(b)(3)(A) and (B) and adds the enactment date of section 30B (August 8, 2005) to implement section 45W(c)(3)(B), which incorporates the requirements of section 30B(b)(3)(A) and (B).

#### D. Gross Vehicle Weight Rating

Proposed § 1.45W–1(b)(4) would define “gross vehicle weight rating” (GVWR) as having the meaning provided in 49 CFR 571.3(b) and 40 CFR 86.082–2. The Department of Transportation (DOT) definition of GVWR in 49 CFR 571.3(b) (providing definitions related to Federal Motor Vehicle Safety Standards) is substantially identical to the EPA definition of GVWR in 40 CFR 86.082–2 (related to the control of emissions from highway vehicles and engines). Because “gross vehicle weight rating” is a term of art embedded in the regulatory regimes of two other Federal agencies, proposed § 1.45W–1(b)(4) would provide a definition consistent with existing DOT and EPA regulations.

#### E. Manufacturer

Proposed § 1.45W–1(b)(5)(i) would define “manufacturer” as any

manufacturer within the meaning of the regulations prescribed by the Administrator of the EPA for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 *et seq.*) and as defined in 42 U.S.C. 7550(1). This definition would repeat the substance of the definition of “manufacturer” within section 30D(d)(3)’s definition of “qualified manufacturer,” which is incorporated by section 45W(c)(1). Consistent with the definition of “manufacturer” provided in § 1.30D–2(b)(28), proposed § 1.45W–1(b)(5)(i) would provide that, if multiple manufacturers are involved in the production of a vehicle, the requirements of section 30D(d)(3) must be met by the manufacturer that satisfies the reporting requirements of the greenhouse gas emissions standards set by the EPA under the Clean Air Act (42 U.S.C. 7521 *et seq.*) for the subject vehicle.

In addition, the proposed rules would move the existing rule regarding the modification of a new motor vehicle that has not yet been placed in service from § 1.30D–2(b)(28)(ii)(B) to § 1.45W–1(b)(5)(ii) so that all rules related to the section 45W credit would be included in the section 45W regulations. This rule allows a manufacturer that modifies a new motor vehicle (as defined in 42 U.S.C. 7550(3)) that does not satisfy the requirements of section 45W(c)(3) so that the vehicle, after modification, does satisfy such requirements to enter into an agreement under section 30D(d)(3) if such modification occurs prior to the new motor vehicle being placed in service.

#### F. Placed in Service

Under proposed § 1.45W–1(b)(6), a qualified commercial clean vehicle would be considered “placed in service” on the date the taxpayer takes possession of the vehicle. This proposed definition is consistent with the definition provided in § 1.30D–2(b)(36) and § 1.25E–1(b)(10), which gives effect, in the specific context of vehicles, to the general concept of “placed in service” from other Code provisions addressing credits and depreciation. *See* § 1.46–3(d)(1)(ii) and (d)(4)(i) (for qualified investments, property is considered placed in service in the earlier of the period for depreciation with respect to such property begins or when placed in a condition or state of readiness and availability for a specifically assigned function); § 1.167(a)–11(e)(1)(i) (for purposes of depreciation, property is first placed in service when first placed in a condition or state of readiness and availability for a specifically assigned function); and § 1.179–4(e) (property is

considered placed in service when placed in a condition or state of readiness and availability for a specifically assigned function); *see also Consumers Power Co. v. Comm’r*, 89 T.C. 710 (1987) (citing §§ 1.46–3(d)(1)(ii) and 1.167(a)–11(e)(1)(i), hydroelectric plant placed in service for purposes of depreciation and investment credit when all phases of preoperational testing were completed, thereby demonstrating that the plant was available for service on a regular basis); *Noell v. Comm’r*, 66 T.C. 718, 728–729 (1976) (citing § 1.46–3(d)(1)(ii), landing strip placed in service for purposes of investment credit when strip was paved and therefore available for full service). The proposed definition is also consistent with regulations issued under Code sections addressing the excise tax on heavy trucks and trailers, 26 CFR 145.4051–1(c)(2) of the Temporary Excise Tax Regulations under the Highway Revenue Act of 1982 (Pub. L. 97–424) (“a vehicle shall be considered placed in service on the date on which the owner of the vehicle took actual possession of the vehicle”).

#### G. Plug-in Hybrid Electric Vehicle

Proposed § 1.45W–1(b)(7) would define “plug-in hybrid electric vehicle” (PHEV) as a vehicle that uses batteries that can be recharged from an external source of electricity to power an electric motor that propels the vehicle to a significant extent, and another fuel, such as gasoline or diesel, to power an ICE or other propulsion source. This definition is consistent with section 45W(c)(3)(A), which requires, in part, a vehicle propelled by an electric motor that draws electricity from a battery, and with section 45W(b)(1)(A), which contemplates differing basis percentages for purposes of calculating the amount of the section 45W credit depending on whether a vehicle is powered in part by a gasoline or diesel ICE.

#### H. Plug-in Hybrid Fuel Cell Electric Vehicle

Proposed § 1.45W–1(b)(8) would define “plug-in hybrid fuel cell electric vehicle” (PHFCEV) as a vehicle that uses batteries that can be recharged from an external source of electricity to power an electric motor that propels the vehicle to a significant extent and a hydrogen fuel source that powers an electric motor through the fuel cell system. This definition is consistent with section 45W(c)(3)(A), which requires, in part, a vehicle propelled by an electric motor that draws electricity from a battery.

#### I. Qualified Commercial Clean Vehicle

Proposed § 1.45W–1(b)(9) would define “qualified commercial clean vehicle” to mean a vehicle that meets the requirements of section 45W(c) and § 1.45W–3(b) through (d). Because section 30D(d)(1)(C), incorporated by section 45W(c)(1), requires a qualified commercial clean vehicle to be made by a qualified manufacturer, proposed § 1.45W–1(b)(9)(i), (ii), and (iii) would add that a vehicle does not meet the requirements of section 45W(c) if the qualified manufacturer fails to provide a periodic written report for such vehicle prior to the vehicle being placed in service by the taxpayer claiming the credit reporting the vehicle identification number of such vehicle, and certifying compliance with the requirements of section 45W(c); if the qualified manufacturer provides incorrect information with respect to the vehicle on such report; or if the qualified manufacturer fails to update its report in the event of a material change with respect to the vehicle. These proposed rules are consistent with those that apply to qualified manufacturers in the context of other clean vehicle credits. *See* § 1.30D–2(b)(32).

#### J. Qualified Manufacturer

Proposed § 1.45W–1(b)(10) would define “qualified manufacturer,” consistent with § 1.30D–2(b)(42), to mean a manufacturer that meets the requirements described in section 30D(d)(3) at the time the manufacturer submits a periodic written report to the IRS under a written agreement described in section 30D(d)(3). The term “qualified manufacturer” would not, under the proposed rule, include any manufacturer whose qualified manufacturer status has been terminated by the IRS. Proposed § 1.45W–1(b)(10) would further provide that the IRS may terminate qualified manufacturer status for fraud, intentional disregard, or gross negligence with respect to any requirements of sections 25E, 30D, 45W, regulations or any guidance thereunder, including with respect to the periodic written reports described in section 30D(d)(3). *See* § 601.601 of the Statement of Procedural Rules (26 CFR part 1).

#### K. Secretary

Proposed § 1.45W–1(b)(11) would provide that the term “Secretary” has the meaning provided in section 7701(a)(11)(B) of the Code.

#### L. Section 45W Regulations

Proposed § 1.45W–1(b)(12) would define the term “section 45W

regulations” to mean §§ 1.45W–1 through 1.45W–5.

#### III. Amount of Section 45W Credit; Incremental Cost

Proposed § 1.45W–2 would provide rules for determining the amount of the section 45W credit, including the determination of incremental cost for qualified commercial clean vehicles.

##### A. Per-Vehicle Credit Amount

Section 45W(b)(1) provides that, subject to section 45W(b)(4), the amount of the section 45W credit for a qualified commercial clean vehicle placed in service during the taxable year is equal to the lesser of: (1) 15 percent of the basis in such vehicle, or 30 percent in the case of a vehicle not powered by a gasoline or diesel ICE; or (2) the incremental cost of such vehicle (as that phrase is defined in section 45W(b)(2)). Section 45W(b)(4) limits the amount of the section 45W credit with respect to any qualified commercial clean vehicle to \$7,500 in the case of a vehicle that has a GVWR of less than 14,000 pounds, and \$40,000 in the case of any other vehicle.

Proposed § 1.45W–2(a) would therefore provide that, subject to the limitation in section 45W(b)(4), the per-vehicle credit amount under section 45W(b)(1) with respect to any qualified commercial clean vehicle is the lesser of 15 percent of the basis of such vehicle (or 30 percent in the case of a vehicle not powered by a gasoline or diesel ICE), or the incremental cost of such vehicle.

##### B. Incremental Cost of a Qualified Commercial Clean Vehicle

Section 45W(b)(2) provides that the incremental cost of any qualified commercial clean vehicle is an amount equal to the excess of the purchase price for such vehicle over such price of a comparable vehicle. Section 45W(b)(3) defines a comparable vehicle, with respect to any qualified commercial clean vehicle, as a vehicle powered solely by a gasoline or diesel ICE that is comparable in size and use to such vehicle.

Section 45W incentivizes taxpayers to purchase vehicles with certain clean propulsion technologies instead of vehicles powered solely by a gasoline or diesel ICE. Any cost comparison between such vehicles and their ICE alternatives, no matter how precisely defined, would inevitably reflect cost differences beyond those associated with the propulsion technologies (for example, a custom body would likely create a cost difference between two otherwise similar vehicles). If such cost

differences were reflected in the amount of the credit, the credit could incentivize adoption of vehicle features unrelated to the purposes of section 45W.

Proposed § 1.45W–2(b) would therefore provide that incremental cost is determined by multiplying the manufacturer’s cost of the components necessary for the powertrain of the qualified commercial clean vehicle by the retail price equivalent (RPE) of that vehicle, and then subtracting from that amount the product of the manufacturer’s cost of the powertrain of the comparable vehicle and the RPE of that vehicle. Expressed formulaically, the rule is as follows:

$$\text{Incremental cost} = (\text{cost of qualified commercial clean vehicle powertrain} \times \text{RPE of qualified commercial clean vehicle}) - (\text{cost of comparable vehicle powertrain} \times \text{RPE of comparable vehicle})$$

This approach attempts to eliminate, to the extent possible, any cost differences unrelated to the propulsion technologies of the vehicles (*see* also the discussion of “comparable vehicle” in section III.D of this Explanation of Provisions). Application of an RPE (*see* section III.C of this Explanation of Provisions) adjusts the manufacturer’s cost of a powertrain to reflect the taxpayer’s cost with respect to that powertrain. *See* section III of this Explanation of Provisions for a discussion of the ways in which a taxpayer might ascertain manufacturer’s costs.

The Treasury Department and the IRS, in consultation with the DOE, are proposing an incremental cost equation based on the incremental cost of the powertrain because the powertrain is a large fraction of the incremental cost between a clean vehicle and a comparable vehicle and because there is robust data available to verify the difference in costs between vehicles. This incremental cost equation is consistent with current modeling done by the DOE regarding the costs of clean vehicles compared to ICE vehicles. As modeling techniques, data capabilities, and vehicle design evolve, the Treasury Department and the IRS will continue to study this approach.

To implement this approach in the context of the range of propulsion technologies and configurations contemplated by the statute (that is, BEVs, FCEVs, PHEVs, and PHFCEVs), the Treasury Department and the IRS, in consultation with the DOE, developed specific equations and associated definitions for BEVs, FCEVs, PHEVs, and PHFCEVs that would be provided

in proposed § 1.45W–2(c)(2) through (5) and (d). These equations would be powertrain-specific versions of the general equation described in proposed § 1.45W–2(b) and would specify the cost of the components that, with respect to each type of powertrain, comprise the powertrain cost. For example, the cost of a BEV powertrain would, under the rule provided in § 1.45W–2(c)(2), be equal to the sum of the costs of the electric traction drive system, the battery, and the electrical accessories, each a term defined in § 1.45W–2(d)(1) through (3). These equations and rules provided in proposed § 1.45W–2(c)(2) through (5), which address the cost of BEV, PHEV, FCEV, and PHFCEV powertrains and the cost of ICE powertrains of comparable vehicles, are consistent with the incremental cost provisions of section 45W(b)(2) and (3). The Treasury Department and the IRS welcome comments on these proposed incremental cost equations and rules. In particular, comments are requested on whether other vehicle equipment or aspects of a vehicle’s design should be included in the incremental cost equations. Any recommended additions, however, must be supportable by robust, verifiable quantitative data.

#### C. Retail Price Equivalent and Safe Harbor

Because section 45W(b)(2) defines incremental cost in terms of purchase price rather than manufacturer’s cost, an RPE is necessary to adjust a manufacturer’s cost of a qualified commercial clean vehicle powertrain and an ICE powertrain to reflect a taxpayer’s purchase price of such powertrains. RPEs vary from vehicle to vehicle, manufacturer to manufacturer, and across different segments of the market (that is, a reasonable RPE for a lightweight vehicle may differ from a reasonable RPE for medium or a heavy-duty vehicle). Consistent with this understanding, proposed § 1.45W–2(b)(1) would allow taxpayers to calculate the incremental cost of a qualified commercial clean vehicle using the RPE applicable to such vehicle.

Proposed § 1.45W–2(b)(3)(i) would provide that a qualified commercial clean vehicle’s RPE is determined by calculating the ratio of the manufacturer’s suggested retail price (MSRP) of such vehicle to the manufacturer’s cost to manufacture such vehicle. Proposed § 1.45W–2(b)(3)(i) through (iii) would further provide that the MSRP represents the sum of the retail price and the retail delivered price suggested by the manufacturer for each accessory or item of optional equipment

which is not included within the retail price as reported on the label that is affixed to the windshield or side window of the vehicle, as described in 15 U.S.C. 1232. Because RPE represents the ratio of the MSRP of the vehicle to the manufacturer’s cost, it is understood, for purposes of the incremental cost determination required by section 45W and proposed § 1.45W–2(b)(3), to represent that ratio with respect to every component of the vehicle, including those that comprise the vehicle’s powertrain.

The Treasury Department and the IRS understand that providing the precise RPE for a vehicle may involve the effective disclosure of proprietary information. For this reason, the Treasury Department and the IRS, in consultation with the DOE, intend to provide RPE safe harbors for different segments of the vehicle market in the near term. Taxpayers are advised to check [www.irs.gov](http://www.irs.gov) for updates. See section VI.C of the Background section of this preamble.

#### D. Comparable Vehicle

Section 45W(b)(3) provides that, for purposes of determining incremental cost, the term “comparable vehicle” means, with respect to any qualified commercial clean vehicle, any vehicle that is powered solely by a gasoline or diesel ICE and that is comparable in size and use to such vehicle. To clarify the meaning of “size and use,” proposed § 1.45W–2(b)(4) would provide that a vehicle powered solely by a gasoline or diesel ICE is comparable in size and use to a qualified commercial clean vehicle if the vehicles have substantially similar GVWRs, number of doors, towing capacity, passenger capacity, cargo capacity, mounted equipment, drivetrain type, overall width, height and ground clearance, trim level, and so on. The Treasury Department and the IRS intend this list to be representative of the types of criteria under which the comparability of two vehicles would be assessed. This list also distinguishes such criteria from the mere performance characteristics of powertrains (which, if used as a sole basis for comparison, could result in a negative incremental cost and therefore a section 45W credit of \$0). In other words, a solely gasoline- or diesel-powered ICE vehicle is not necessarily comparable to a qualified commercial clean vehicle simply because the performance characteristics of the powertrains are identical. Rather, a comparable vehicle must be in the same class and share other characteristics, as appropriate to the vehicle, such as number of doors, cargo capacity, drivetrain type, and trim level.

See the example provided in § 1.45W–2(b)(4)(iv).

Proposed § 1.45W–2(b)(4)(ii) would provide that, in the specific circumstance where the qualified manufacturer of a qualified commercial clean vehicle manufactures a solely gasoline- or diesel-powered ICE version (excluding prototype or other non-production versions) of such qualified commercial clean vehicle, meaning a vehicle of the same model and model year, and with features substantially similar to those of the qualified commercial clean vehicle (such as those noted in the prior paragraph), such vehicle is the only comparable vehicle for purposes of the incremental cost determination under section 45W(b)(1)(B) and (2). In circumstances in which a qualified manufacturer of a qualified commercial clean vehicle does not manufacture a solely gasoline- or diesel-powered ICE version of such qualified commercial clean vehicle that is of the same model and model year, and with features substantially similar to those of the qualified commercial clean vehicle, the comparable vehicle for purposes of the incremental cost determination under section 45W(b)(1)(B) and (2) would be determined by the taxpayer (or manufacturer) based on the criteria identified in the prior paragraph.

#### E. Negative Incremental Cost Treated as Zero

Proposed § 1.45W–2(c)(8) would treat an incremental cost calculation that results in a negative figure (meaning the qualified manufacturer’s cost of the qualified commercial clean vehicle’s powertrain is less than the manufacturer’s cost of the ICE powertrain of a comparable vehicle) as zero. Because zero would in every case be the lesser of the allowable basis percentage, as provided in section 45W(b)(1), no credit would be allowed with respect to such vehicle. This rule is consistent with the “lesser of” comparison required by section 45W(b)(1) and the general purpose of section 45W to incentivize the purchase of vehicles with certain clean propulsion technologies instead of ICE alternatives. The fact that a taxpayer’s calculation of incremental cost under the general rule is zero for a particular qualified commercial clean vehicle would not preclude that taxpayer from using a safe harbor described in proposed § 1.45W–2(c)(11) to determine incremental cost in order to claim the section 45W credit with respect to that vehicle.

#### F. Incremental Cost if No Comparable Vehicle Exists

If the particular characteristics of a qualified commercial clean vehicle lead a taxpayer to conclude that no comparable vehicle exists and, as a result, no incremental cost is calculable for that vehicle, proposed § 1.45W–2(c)(9) would provide that the incremental cost of such vehicle is zero. However, consistent with the proposed rule described in the preceding paragraph, the fact that the incremental cost under the general rule is zero for a particular qualified commercial clean vehicle does not preclude that taxpayer from using a safe harbor described in proposed § 1.45W–2(c)(11) to determine incremental cost in order to claim the section 45W credit with respect to that vehicle. This proposed rule would apply only to situations in which no ICE vehicle alternative is produced by any manufacturer, for example, because the intended operating environment precludes the use of ICE vehicles. At this time, the Treasury Department and the IRS, in consultation with the DOE, have not identified any qualified commercial clean vehicles for which no comparable vehicle exists. For these reasons, proposed § 1.45W–2(c)(9) is expected to be relevant only in rare instances. The Treasury Department and the IRS note that proposed § 1.45W–2(c)(9) aligns with one purpose of section 45W—to incentivize the adoption of electric, hybrid, and fuel cell vehicles instead of ICE alternatives.

#### G. Power Takeoffs

Some vehicles eligible for the section 45W credit may use power takeoffs to transmit power to drive machinery or equipment other than the vehicle itself.

In the case of a BEV or hybrid vehicle, the use of power takeoffs might necessitate additional batteries; in the case of an FCEV, the use of power takeoffs might necessitate additional fuel cells or additional hydrogen storage. This situation, however, appears indistinguishable from a situation in which a BEV or hybrid vehicle might be equipped with additional batteries for other reasons (for example, extended range), or a situation in which an FCEV might be equipped with additional fuel cells for other reasons. Even if this were not the case, determining, at the time the taxpayer claims the credit, the relative extent to which the batteries in any given qualified commercial clean vehicle might be employed to power the vehicle and the ancillary machinery would present significant challenges. As a result, proposed § 1.45W–2(c)(7)

would provide that the incremental cost calculation for a qualified commercial clean vehicle with a power takeoff would be carried out in the same manner as the incremental cost calculation for a qualified commercial clean vehicle without a power takeoff. Specifically, an appropriate comparable vehicle would be selected (likely a vehicle with the same type of takeoff-powered machinery or equipment or machinery) and the manufacturer's cost of the ICE powertrain would be subtracted from the qualified manufacturer's cost of the BEV, FCEV, PHEV, or PHFCEV powertrain (inclusive of any additional batteries, fuel cells, or hydrogen storage).

#### H. Auxiliary Power Units

Some vehicles eligible for the section 45W credit may use auxiliary power units (APUs) to drive machinery or equipment that is mounted or installed on the vehicle; such APUs are not necessarily electric, hybrid, or fuel cell based. Proposed § 1.45W–2(c)(6) would clarify that the incremental cost of qualified commercial clean vehicles outfitted with APUs is calculated exclusive of the installed APUs. For example, the comparable vehicle for a BEV outfitted with an APU to drive an aerial lift may be an ICE truck outfitted with an APU to drive an aerial lift (see discussion of comparable vehicles in section III.D of this Explanation of Provisions), but the manufacturer's cost of the APU is disregarded in the incremental cost equation for both the BEV and the ICE vehicles. Similarly, to calculate the incremental cost of a FCEV with an installed APU that powers the refrigeration unit, the appropriate comparable vehicle may be an ICE refrigerator truck, but the manufacturer's cost of the APU is disregarded for both vehicles.

#### I. Reliance on Qualified Manufacturer's Incremental Cost Calculation and Safe Harbor

Information regarding a qualified manufacturer's cost for the components of a qualified commercial clean vehicle powertrain may not be readily available to taxpayers. If a qualified manufacturer discloses this information to a taxpayer to facilitate the taxpayer's calculation of incremental cost, or if the qualified manufacturer discloses its incremental cost calculation for a qualified commercial clean vehicle it manufactures as provided in section 45W and these regulations, proposed § 1.45W–2(c)(10) would permit taxpayers to rely on such disclosure. Taxpayers would, however, be required to retain the disclosure documentation

in their records as long as the period of limitations for the taxable period in which the credit was claimed remains open. A qualified manufacturer that discloses its incremental cost calculation for a qualified commercial clean vehicle it manufactures must base such incremental cost calculation on actual cost data for both the qualified commercial clean vehicle and the comparable vehicle. Similarly, a taxpayer that calculates incremental cost by using cost data for the qualified commercial clean vehicle provided by the qualified manufacturer must use actual cost data for the comparable vehicle for such calculation. See the definition of “qualified manufacturer” provided in proposed § 1.45W–1(b)(10) and discussed in section II.J of this Explanation of Provisions for the potential consequences of qualified manufacturer fraud, intentional disregard, and gross negligence with respect to the requirements of section 45W, the section 45W regulations, and any guidance issued under section 45W.

Alternatively, taxpayers may rely on the incremental cost safe harbors published in Notice 2023–9 and Notice 2024–5, and any succeeding guidance published in the Internal Revenue Bulletin, as applicable, for the taxable year in which a credit is claimed. These incremental cost safe harbors are based on the incremental cost analysis conducted by the DOE, as described in periodic reports published by the DOE.

#### J. Powertrain Subcomponents

The Treasury Department and the IRS, in consultation with the DOE, developed proposed § 1.45W–2(d)(1) through (9) to provide definitions and clarify the typical subcomponents of a BEV, FCEV, PHEV, PHFCEV, and ICE powertrain for purposes of determining a qualified commercial clean vehicle's incremental cost under section 45W(b)(2) and (3) and § 1.45W–2(c). Recognizing that different vehicles may implement different technologies, system configurations, and design decisions, the subcomponents listed in the definitions in § 1.45W–2(d)(1) through (9) are not intended to prescribe required subcomponents or to be an exhaustive list of those that may be appropriate to consider for purposes of determining the incremental cost of a given vehicle. For example, the qualified manufacturer's cost of a BEV powertrain must reflect the qualified manufacturer's cost of the electric traction drive system, battery, transmission, and electrical accessories, but each of those components are comprised of subcomponents that may vary among vehicles.



#### K. Incremental Cost of Qualified Commercial Clean Vehicle Previously Placed in Service by Another Person

Proposed § 1.45W–2(f)(1) would provide that the incremental cost of a qualified commercial clean vehicle previously placed in service by another person is calculated by multiplying the incremental cost of such vehicle when new by a residual value factor determined by the age of the vehicle. Proposed § 1.45W–2(f)(2) would provide that the age of such a vehicle is determined by subtracting the model year of the vehicle from the calendar year in which the taxpayer places the vehicle in service as a qualified commercial clean vehicle. Because model years are, in some cases, released ahead of calendar years, and because it is possible for a single vehicle to be sold more than once within a twelve-month period, an age of zero (or a negative number in the case of a vehicle placed in service twice before the calendar year corresponding to its model year) does not result in an incremental cost of a used qualified commercial clean vehicle equal to that of the vehicle when new.

The residual value factor table in proposed § 1.45W–2(f)(3) reflects an analysis conducted by the DOE with respect to the decline in the value of vehicles with ICE powertrains over time. The analysis for light-duty vehicles (Class 1–3 Passenger Car and Light Truck) utilized MSRP and “True Market Value” estimates from Edmunds to calculate residual values across specific makes and models, powertrains, vehicle age, and size classes for vehicles with model years from 2010 to 2021. For medium to heavy duty vehicles (Class 4–8), residual values were calculated from used vehicle listing data from Commercial Truck Trader and *TruckPaper.com*, validated against data from Price Digests for vehicles with model years from 2000 to 2020. As a mature propulsion technology, ICE vehicles exhibit a relatively stable pattern of declining value compared to their clean vehicle counterparts, meaning, in part, that ICE vehicles tend to retain more value over time than clean vehicles. Analysis of the declining value patterns of ICE vehicles compared to their clean counterparts, however, suggests that the residual values of clean vehicles are coming into alignment with those of ICE vehicles. As a result, the ICE vehicle depreciation pattern represents a good approximation of the likely depreciation pattern for clean vehicles as clean vehicle technologies continue to mature. The residual value factor is applied to the incremental cost of the qualified commercial clean

vehicle when new, regardless of whether that incremental cost is determined by the taxpayer, supplied to the taxpayer by the qualified manufacturer, or provided by safe harbor guidance published in the Internal Revenue Bulletin for the tax year in which such vehicle is originally placed in service.

#### IV. Qualified Commercial Clean Vehicle

Proposed § 1.45W–3 would provide rules related to a vehicle’s qualification as a qualified commercial clean vehicle.

##### A. Vehicles Acquired for Use or Lease and Not for Resale

Section 45W(c)(1) provides, in part, that a qualified commercial clean vehicle must be acquired for use or lease by the taxpayer and not for resale. Proposed § 1.45W–3(b)(1), would provide that, except in cases involving tax-exempt entities identified in section 45W(d)(2), a taxpayer acquires a vehicle for use or lease if the taxpayer acquires it for use or lease in a trade or business of the taxpayer. Thus, for example, if a taxpayer that is engaged in the business of leasing vehicles to customers acquires a commercial clean vehicle for the purpose of leasing the vehicle to customers as part of that business, this requirement would be satisfied.<sup>2</sup> For further consideration of vehicles purchased by a vehicle leasing business qualifying for a section 45W credit, see the recapture rules explained in V.E of this Explanation of Provisions.

Proposed § 1.45W–3(b)(1) is consistent with the requirement under section 45W(c)(4) that the vehicle be of a character subject to the allowance for depreciation, which, under section 167(a), extends only to property used in a trade or business or held for the production of income. The proposed rule is also consistent with the trade or business purposes expressed in section 45W(c)(1), the statutory identification of the section 45W credit as being for “commercial” clean vehicles, and the allowance of the credit as a section 38 general business credit.

If the lease of a qualified commercial clean vehicle would not be respected as a lease for Federal income tax purposes, proposed § 1.45W–3(b)(2) would treat the lessor as having acquired the vehicle for resale and disallow the credit to such lessor with respect to the purportedly leased vehicle. Whether the lessee may claim the section 45W credit

<sup>2</sup> Whether an activity is treated as a trade or business depends on the facts and circumstances of the activity. Courts have considered factors such as the profit motive of the taxpayer and the regularity and continuity of the activity. *Commissioner v. Groetzing*, 480 U.S. 23 (1987).

with respect to the vehicle would depend on whether the requirements of section 45W and the section 45W regulations are met with respect to the vehicle. This rule, which recognizes that a sale may, in some cases, be mischaracterized as a lease for Federal income tax purposes, aligns with section 45W(c)(1) to limit “use and lease” to the scenarios in which the section 45W credit is allowable to a taxpayer.

##### B. On-Road Vehicles

Section 45W(c)(2)(A) provides that a qualified commercial clean vehicle may be a vehicle “that meets the requirements of subparagraph (D) of section 30D(d)(1) and is manufactured primarily for use on public streets, roads, and highways (not including a vehicle operated exclusively on a rail or rails).” Regarding the former requirement, section 30D(d)(1)(D) states that the vehicle must be “treated as a motor vehicle for purposes of title II of the [CAA],” a determination that implicitly incorporates the EPA’s application of the relevant CAA provisions, as well as any applicable regulations or guidance thereunder. The latter requirement, “manufactured primarily for use on public streets, roads, and highways,” occurs with sufficient frequency in the Internal Revenue Code, the U.S. Code more broadly, and various regulations and guidance issued thereunder to warrant deference to existing understandings of the phrase across Federal statutes.

Section 45W(c)(2)(B) provides, in the alternative, that a qualified commercial clean vehicle may be a vehicle “that is mobile machinery, as defined in section 4053(8) (including vehicles that are not designed to perform a function of transporting a load over the public highways).” The definition of mobile machinery provided in section 4053(8) presents significant challenges for taxpayers and the IRS in the context of section 45W. For a discussion of the complexities of section 4053(8) in the context of section 45W generally, and the implications of those complexities for the credit-eligibility of off-road vehicles in particular, see section VII of this Explanation of Provisions.

Section 4053(8) is an exemption to certain Federal excise taxes imposed on highway vehicles (see sections 4051(a), 4071(a), and 4481(a)), a concept defined in § 48.4061(a)–1(d) of the Manufacturers and Retailers Excise Tax Regulations as “any self-propelled vehicle, or any trailer or semitrailer, designed to perform a function of transporting a load over public highways, whether or not also designed



to perform other functions.” In other words, mobile machinery as defined in 4053(8), in the context of existing Federal excise taxes, is meaningful only as a subset of highway vehicles. As a result, most, if not all, vehicles traditionally considered “mobile machinery” (including those exempt from the aforementioned Federal excise taxes) would be eligible for the section 45W credit under section 45W(c)(2)(A).

A vehicle may satisfy the requirements of both section 45W(c)(2)(A) and (B). For example, a digger derrick truck exempt from the tax imposed by section 4051 by reason of section 4053(8) would qualify for the credit under section 45W(c)(2)(B). Furthermore, because it is a “highway vehicle” under § 48.4061(a)–1(d), the digger derrick would almost certainly also qualify under section 45W(c)(2)(A), meaning that it would be treated as a motor vehicle for purposes of title II of the CAA and be considered manufactured primarily for use on the public streets, roads, and highways. In such instances, the taxpayer may choose the prong of section 45W(c)(2) under which the vehicle will qualify, which may be relevant for recordkeeping and other purposes.

#### C. Electric Motor and Battery Requirements

Section 45W(c)(3)(A) provides requirements with respect to the electric motor and battery of certain qualified commercial clean vehicles. In part, section 45W(c)(3)(A) requires that a qualified commercial clean vehicle be propelled to a significant extent by an electric motor that draws electricity from a battery that meets certain specifications depending on the GVWR of the vehicle. Proposed § 1.45W–3(d)(1) would repeat the substance of section 45W(c)(3)(A). Proposed § 1.45W–3(d)(2) would clarify that a battery is capable of being recharged from an external source of electricity if such source of electricity is not an integral part of the vehicle. Proposed § 1.45W–3(d)(2) would also provide the example of a regenerative braking system as an integral part of the vehicle and, thus, not an external source of electricity. This rule would render certain hybrid vehicles ineligible for the section 45W credit, a result consistent with the requirement that the vehicle be propelled to a significant extent by an electric motor which draws electricity from a battery and the requirement for an external source of electricity.

#### V. Special Rules

Section 45W(d) provides three special rules. First, section 45W(d)(1) provides, by cross reference to section 30D(f), that

rules similar to the rules under section 30D(f)(1) through (9) apply for purposes of the section 45W credit. Second, section 45W(d)(2) provides that a qualified commercial clean vehicle placed in service by a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv) is not required to be of a character subject to the allowance for depreciation if it is not subject to a lease. Third, section 45W(d)(3) provides that any vehicle for which a credit was allowed under section 30D is not allowed a section 45W credit.

Proposed § 1.45W–4 would provide special rules relating to the credit eligibility of a vehicle resulting from certain transactions and uses, the interaction of the section 45W credit with other credits, and recapture of the section 45W credit. These rules are described in Part V.A. through E. of this Explanation of Provisions.

#### A. No Double Benefit Rule

Section 30D(f)(8), as incorporated by section 45W(d)(1), provides that a section 45W credit is allowed only once with respect to a vehicle, as determined based upon the vehicle identification number of such vehicle. Section 45W(d)(3) provides that no credit is allowed under section 45W with respect to any vehicle for which a credit was allowed under section 30D. To consolidate these two rules, proposed § 1.45W–4(a)(1) would provide that no credit will be allowed under section 45W(a) with respect to any vehicle for which a section 45W credit or a section 30D credit was previously allowed for such vehicle.

Section 45W(d)(1), which incorporates section 30D(f)(2), provides a general no double benefit rule with respect to any deduction or other credit allowable under chapter 1 for a vehicle for which a credit was allowed under section 45W. Proposed § 1.45W–4(a)(2) would repeat the substance of section 30D(f)(2). This proposed rule is consistent with the no double benefit rule provided in § 1.25E–2(b)(1).

#### B. Vehicles Previously Placed in Service

Section 45W does not explicitly prohibit vehicles previously placed in service from being eligible for a section 45W credit.<sup>3</sup> Vehicles previously placed in service present challenges with regard to the statutory no double benefit

rules in that taxpayers seeking to claim the section 45W credit for such vehicles may not have access to information about whether a deduction or credit was previously allowed, or to what extent, and the IRS would be prohibited from providing such information because disclosure of information related to another taxpayer’s claim for a tax credit for a particular vehicle is confidential return information and is protected from disclosure under section 6103 of the Code. Nonetheless, the normal rules requiring taxpayers to establish their entitlement to a credit or other tax benefit apply. Accordingly, a taxpayer claiming a 45W credit for a vehicle previously placed in service must maintain evidence in their books and records sufficient to establish that no credit under section 30D or section 45W has been allowed previously with respect to the vehicle, and in the case of any prior credit allowed under section 25E, the amount of such prior credit, and must provide such information to the IRS upon request. *See* § 1.6001–1; *Roberts v. Comm’r*, 62 T.C. 834, 836 (T.C. 1974); *Isaacs v. Comm’r*, 109 T.C.M. (CCH) 1624 (T.C. 2015). Such evidence may include signed attestations from all previous owners that a credit was not claimed with respect to such vehicle.

The proposed regulations would also amend § 1.25E–2 by adding a new paragraph (b)(3), which would clarify that a vehicle for which a credit was allowed under section 45W may qualify for a section 25E credit in a subsequent year with no reduction in the amount of allowable section 25E credit. This rule would be consistent with § 1.25E–2(b)(2), which provides a similar rule regarding the interaction between the section 25E credit and the section 30D credit.

#### C. Credit Ineligibility Resulting From Certain Transactions and Uses

Proposed § 1.45W–4(b)(2) would provide that if a sale of a qualified commercial clean vehicle is cancelled before the taxpayer places the vehicle in service, then (i) the taxpayer may not claim the section 45W credit with respect to such vehicle; (ii) the vehicle may still be eligible for the section 45W credit; and (iii) a subsequent buyer will not be required to apply the residual value rules of § 1.45W–2(f)(3) to determine the incremental cost of the vehicle.

Proposed § 1.45W–4(b)(3) would provide that if a taxpayer returns a qualified commercial clean vehicle to the seller within 30 days of placing such vehicle in service, then (i) the taxpayer may not claim the section 45W credit

<sup>3</sup> In the Description of Energy Tax Changes Made by Public Law 117–169, the Joint Committee on Taxation describes section 45W as “creat[ing] a credit for qualified commercial clean vehicles originally placed in service by a taxpayer,” and in footnote 111 adds: “A technical correction may be necessary to reflect this intent.” JCT, Description of Energy Tax Changes Made by Public Law 117–169, p. 58 (Apr. 19, 2023).

with respect to such vehicle; (ii) the vehicle may still be eligible for the section 45W credit; and (iii) a subsequent buyer must apply the residual value rules of § 1.45W-2(f)(3) to determine the incremental cost of the vehicle.

In the case of a resale of a qualified commercial clean vehicle, proposed § 1.45W-4(b)(4) would provide that if a taxpayer resells such vehicle within 30 days of placing the vehicle in service, then (i) the taxpayer is treated as having acquired such vehicle with the intent to resell; (ii) the taxpayer may not claim the section 45W credit with respect to the vehicle; (iii) the vehicle may still be eligible for the section 45W credit; and (iv) a subsequent buyer must apply the residual value rules of § 1.45W-2(f)(3) to determine the incremental cost of the vehicle.

#### D. Business Use of Qualified Commercial Clean Vehicle Required

Section 45W(c)(4) requires a qualified commercial clean vehicle to be of a character subject to the allowance for depreciation. Nothing in section 45W indicates that a partial section 45W credit is allowable with respect to a vehicle that is used only partially for business use and is therefore only partially depreciable. Section 30D, a related clean vehicle credit that was amended by the IRA, explicitly includes an allocation rule to treat such credit as either a business or personal credit based upon business or personal use. *See* section 30D(c)(1). Section 30C, also enacted as part of the IRA, has a similar allocation rule. *See* section 30C(d)(1). The absence of such an allocation rule in section 45W, which was enacted as part of the same legislation, suggests that Congress did not intend for the section 45W credit to reflect less than 100 percent business use.

Proposed § 1.45W-4(b)(5) would provide that if a taxpayer's trade or business use of a qualified commercial clean vehicle is less than 100 percent of the taxpayer's total use of that vehicle (with the exception of incidental personal use, such as a stop for lunch on the way between two job sites) for the taxable year such vehicle is placed in service, including because the vehicle is sold or otherwise disposed of, then the vehicle is ineligible for the section 45W credit. This rule would also apply to a qualified commercial clean vehicle placed in service by a tax-exempt entity, except that 100 percent trade or business use means the tax-exempt entity's use that is related to an exempt purpose or an unrelated trade or business purpose.

#### E. Recapture

Section 30D(f)(5), which is incorporated in section 45W(d)(1), authorizes the Secretary to provide for recapturing the benefit of any section 45W credit allowable with respect to any property which ceases to be property eligible for such credit. Proposed § 1.45W-4(c)(2)(i) would provide that if a taxpayer ceases to use the vehicle for 100 percent trade or business use during the 18-month period beginning on the date the vehicle is placed in service, including because the vehicle is sold or otherwise disposed of, then (i) the taxpayer may not claim the section 45W credit with respect to the vehicle, and if the taxpayer has already claimed the credit, the credit is recaptured; (ii) the vehicle may still be eligible for the section 45W credit; and (iii) a subsequent buyer must apply the residual value rules of § 1.45W-2(f)(3) to determine the incremental cost of the vehicle. In determining the 18-month period as the appropriate length of time for which the vehicle must be used in a trade or business for purposes of recapturing the benefit of any section 45W credit allowable, the Treasury Department and the IRS took into consideration commercial vehicle leasing practices and sought to accommodate such practices.

Proposed § 1.45W-4(c)(2)(ii) would provide that, for a vehicle placed in service by a tax-exempt entity, the 100 percent trade or business use rule (excepting incidental personal use) in § 1.45W-4(b)(5) applies, which means use for an exempt purpose or unrelated trade or business purpose.

#### F. Elective Payment Election

##### 1. Section 6417

Section 6417, enacted by the IRA, provides a benefit to applicable entities (defined in section 6417(d)(1)(A) and § 1.6417-1(c)), which include certain tax-exempt and government entities that are described in section 50(b)(3) or (4). Section 6417 allows an applicable entity to make an election to be treated as making a payment of tax in the amount of certain applicable credits, including the section 45W credit, which results in a refund equal to the amount of the applicable credits if such entity has no other tax liability. Section 6417(d)(2)(A) requires an entity making an election to determine an applicable credit without regard to section 50(b)(3) or (4)(A)(i), effectively turning those sections off for purposes of calculating an applicable credit.

These proposed regulations would make a clarification to proposed

§ 1.6417-6(b)(1)<sup>4</sup> to align with these proposed section 45W regulations. Proposed § 1.6417-6(b)(1) in these proposed regulations would add a reference to section 45W(d)(1) (which incorporates the rules of section 30D(f)(1) related to basis reduction and section 30D(f)(5) and the related proposed § 1.45W-4(c) pertaining to recapture) to the list of examples of provisions of the Code that apply. Accordingly, proposed § 1.6417-6(b)(1) would state that if “another provision of the Code contains a rule that operates without reference to section 50 to reduce the basis of property with respect to which an applicable credit is determined and/or recapture any amount of an applicable credit (such as sections 30C, 45Q(f)(4), 45W(d)(1), and 48(a)(10)), then the rules of that provision of the Code and the regulations issued under that provision of the Code apply, except that any applicable credit continues to be determined without regard to section 50(b)(3) and (4)(A)(i) and by treating any property with respect to which such applicable credit is determined as used in a trade or business of the applicable entity, consistent with section 6417(d)(2) and § 1.6417-2(c).”

#### 2. Leases

Section 45W(d)(2) provides that the section 45W(c)(4) rule regarding depreciation does not apply to any vehicle that is not subject to a lease and that is placed in service by a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv).

Proposed § 1.45W-4(d)(3) would provide that for purposes of section 45W(d)(2), a vehicle is “subject to a lease” if it is leased within 30 days of being placed in service by a tax-exempt entity. For example, a school district purchases and places in service a fleet of electric school buses that otherwise qualify for the section 45W credit. The school district then leases the fleet to a school transportation contractor 31 days after the school district placed the fleet in service. The fleet of electric school buses is not subject to a lease within the meaning of section 45W(d)(2) and proposed § 1.45W-4(d)(3) because the buses were leased more than 30 days after being placed in service by the school district. As a result, the fleet of

<sup>4</sup> Revisions to § 1.6417-6(b)(1) were previously proposed in the notice of proposed rulemaking (REG-118269-23), published in the **Federal Register** (89 FR 76759, September 19, 2024), which sets forth rules regarding the Section 30C Alternative Fuel Vehicle Refueling Property Credit. These proposed regulations include identical proposed language to § 1.6417-6(b)(1) other than the addition of a reference to section 45W(d)(1).

electric school buses may be eligible for the section 45W credit.

This definition of “subject to a lease” aligns with the statutory language that tax-exempt entities may be eligible for the section 45W credit if the qualified commercial clean vehicle at issue meets the relevant criteria near the time of being placed in service, which is when vehicle eligibility is measured.

#### VI. Reporting Requirements

Proposed § 1.45W–5 would provide reporting requirements for purposes of the section 45W credit.

##### A. Requirement To File Return

Section 45W(e) provides that no section 45W credit can be determined with respect to any vehicle unless the taxpayer includes the vehicle identification number of such vehicle on the return of tax for the taxable year. Proposed § 1.45W–5(a) would provide that no section 45W credit is allowed unless the taxpayer claiming such credit files a Federal income tax return or information return, as appropriate, for the taxable year in which the qualified commercial clean vehicle is placed in service. The taxpayer must attach to such return a completed Form 8936, *Clean Vehicle Credits*, or successor form, that includes all information required by the form and instructions. The taxpayer must also attach a completed Schedule A (Form 8936), *Clean Vehicle Credit Amount*, or successor form or schedule, that includes all information required by the schedule and instructions, such as the vehicle identification number of the qualified commercial clean vehicle.

##### B. Credit May Generally Be Claimed on Only One Tax Return

Proposed § 1.45W–5(b)(1) would provide a general rule, subject to the exceptions discussed later in this Explanation of Provisions, that the amount of the section 45W credit attributable to a qualified commercial clean vehicle may be claimed on only one Federal income tax return, including on a joint return in which one of the spouses or the spouse’s wholly-owned business entity is listed on the title as the sole owner of the vehicle. In the event a qualified commercial clean vehicle is placed in service by multiple taxpayers that do not file a joint tax return (for example, in the case of married individuals filing separate returns), no allocation or proration of the section 45W credit will be available, and only one of the taxpayers placing the qualified commercial clean vehicle in service will be eligible for the entirety of the allowable section 45W credit.

Proposed § 1.45W–5(b)(2) would provide a rule for grantor trusts. Specifically, proposed § 1.45W–5(b)(2) would provide that for qualified commercial clean vehicles placed in service by a trust, to the extent the grantor or another person is treated as owning all or part of a trust under sections 671 through 679 of the Code, the section 45W credit will be allocated to such grantor or other person in accordance with § 1.671–3(a)(1).

Proposed § 1.45W–5(b)(3) would provide an exception for qualified commercial clean vehicles placed in service by certain passthrough entities, namely a partnership or S corporation. In such cases, the section 45W credit will be allocated among the partners of the partnership under § 1.704–1(b)(4)(ii) or among the shareholders of the S corporation under sections 1366(a) and 1377(a) of the Code and claimed on the tax returns of the ultimate partners or of the S corporation shareholders.

##### C. Taxpayer Reliance on Manufacturer Certifications and Periodic Written Reports to IRS

Proposed § 1.45W–5(c) would allow taxpayers to rely on certain certifications and information provided by a manufacturer. Under this proposed rule, a taxpayer that acquires a qualified commercial clean vehicle and places it in service would be able to rely on the information and certifications contained in the qualified manufacturer’s written reports to the IRS. The procedures for such periodic written reports are established in guidance published in the Internal Revenue Bulletin. To the extent a taxpayer relies on certifications or attestations from the qualified manufacturer, the qualified commercial clean vehicle the taxpayer acquires will be deemed to meet the requirements of sections 30D(d)(1)(C) and 45W(c)(1).

#### VII. Off-Road Mobile Machinery

Section 45W(c)(2) provides, in part, that the term “qualified commercial clean vehicle” includes “mobile machinery, as defined in section 4053(8) (including vehicles that are not designed to perform a function of transporting a load over the public highways).” Section 4053(8), in turn, defines mobile machinery as any vehicle which consists of a chassis (A) to which there has been permanently mounted (by welding, bolting, riveting, or other means) machinery or equipment to perform a construction, manufacturing, processing, farming, mining, drilling, timbering, or similar operation if the operation of the machinery or equipment is unrelated to transportation on or off the public

highways, (B) which has been specially designed to serve only as a mobile carriage and mount (and a power source, if applicable) for the particular machinery or equipment involved, whether or not such machinery or equipment is in operation, and (C) which, by reason of such special design, could not, without substantial structural modification, be used as a component of a vehicle designed to perform a function of transporting any load other than that particular machinery or equipment or similar machinery or equipment requiring such a specially designed chassis.

Section 4053(8) is an exemption from the tax imposed by section 4051(a) and has been employed as an exemption from the taxes imposed by sections 4071(a) and 4481(a), all of which contribute to the Highway Trust Fund. See section 9503(b) of the Code. In that context, the section 4053(8) definition is relevant only to highway vehicles, defined in § 48.4061(a)–1(d)<sup>5</sup> as “any self-propelled vehicle, or any trailer or semitrailer, designed to perform a function of transporting a load over public highways, whether or not also designed to perform other functions.” The parenthetical in section 45W(c)(2)(B)—“including vehicles that are not designed to perform a function of transporting a load over the public highways”—contradicts that definition and, therefore, arguably expands the traditional category of “mobile machinery” to include off-road vehicles. Such an expanded category might, for purposes of section 45W, include certain agricultural vehicles, construction vehicles, forestry vehicles, utility vehicles designed for airport operations, and other types of off-road vehicles.

However, section 4053(8) and several provisions of section 45W present significant challenges with respect to the administrability of a section 45W credit that encompasses such off-road vehicles. Recognizing that, whenever possible, every word and every provision of a statute should be given effect, *Washington Market Co. v. Hoffman*, 101 U.S. 112, 115–6 (1879), the Treasury Department and the IRS continue to study, and request any relevant comments on, the considerations described in section

<sup>5</sup> The section 4061 manufacturers excise tax on certain highway vehicles was repealed and replaced with the section 4051 retail excise tax on similar vehicles. See Highway Revenue Act of 1982 (Public Law 97–424), effective April 1, 1983. The § 48.4061(a)–1(d) definition of “highway vehicle” is incorporated into the current section 4051 regime by § 145.4051–1(a)(2).

VII.A through G of this Explanation of Provisions.

#### A. Section 4053(8) as Applied to Off-Road Vehicles

The definition of “mobile machinery” provided in section 4053(8) is vehicle specific and fact intensive. Vehicles with chassis that include a pintle hook or that have been modified to accommodate a water tank do not qualify as mobile machinery because such vehicles are not specially designed to serve only (solely) as the mobile carriage or mount for the mounted equipment or machinery. *Florida Power & Light Co. v. U.S.*, 375 F.3d 1119 (Fed. Cir. 2004). For the same reason, peanut drying trailers and boat trailers are not mobile machinery. *Rockwater, Inc. v. U.S.*, No. 4:21–CV–00125–CDL, 2023 WL 2473452 (M.D. Ga. Jan. 3, 2023), aff’d in part, reversed in part and remanded in part, 2024 WL 4799277, (11th Cir. Nov. 16, 2024); *Hostar Marine Transp. Systems, Inc. v. U.S.*, No. 06–10834–DPW, 2008 WL 4615464 (D. Mass. Oct. 16, 2008), aff’d, 592 F.3d 202 (1st Cir. 2010). In addition, highway tractors fitted with winches, compressors, or blowers are not mobile machinery because such equipment, used to load or unload cargo, is not “unrelated to transportation on or off the public highways.” *Schlumberger Technology Corp. and Subsidiaries v. U.S.*, 55 Fed. Cl. 203 (2003).

When applied to off-road vehicles, a category to which section 4053(8) was not traditionally relevant, the text of section 4053(8) presents significant challenges for taxpayers and the IRS. Particular vehicles would, on a vehicle-by-vehicle basis, be rendered ineligible for the section 45W credit for reasons irrelevant to the purpose of the credit, such as the presence of a pintle hook or the fact that the vehicle can carry a load other than its mounted machinery or equipment. Consideration of these types of vehicle features, although critical to ensuring the correct taxation of highway vehicles for purposes of the Highway Trust Fund, would lead to arbitrary results in the context of a credit intended to incentivize the use of clean vehicle propulsion technologies—for example, the eligibility of one vehicle for the section 45W credit and the ineligibility of an identical vehicle, except for the addition of a pintle hook.

To mitigate these challenges, the Treasury Department and the IRS are considering an approach that would deem off-road vehicles (that is, “vehicles not designed to perform a function of carrying a load over the public highways”) to satisfy the requirements of section 4053(8)(B) and

(C). Such an approach would acknowledge that section 4053(8)(B) and (C) assess a vehicle’s potential to cause wear and tear on the public highways. While this is critical in determining whether a vehicle qualifies for an exemption from taxes that fund the Highway Trust Fund, it has no relevance to off-road vehicles. Therefore, this approach would apply the core definition of “mobile machinery” provided in section 4053(8)(A) and, consistent with the cross reference provided in section 45W(c)(2)(B), do so in precisely the same way as section 4053(8)(A) is applied in the context of Federal excise taxes.

While this approach would render vehicle-by-vehicle analysis unnecessary in many cases and might eliminate certain types of inconsistent results with respect to vehicle eligibility for the section 45W credit, categorical bars on eligibility for certain types of vehicles would remain. For example, off-road dump trucks would be ineligible for the credit because their permanently mounted machinery or equipment, that is, the hydraulics that lift the dump body, is not “unrelated to transportation” (the dump structure itself is a vehicle body rather than machinery or equipment; see Notice 2017–5, 2017–6 IRB 779). Agricultural tractors would be ineligible to the extent they lack permanently mounted machinery or equipment. Forklifts could be ineligible because their permanently mounted equipment, which can be used to load and unload goods and transport goods from one location to another, is related to transportation. And mowers would be ineligible because their permanently mounted machinery or equipment does not perform an operation similar to those enumerated in section 4053(8)(A). The Treasury Department and the IRS request comments on other approaches that might be adopted in applying section 4053(8) to off-road vehicles in a manner consistent with both the purpose and text of section 45W and the statutory requirements of section 4053(8), including established case law interpreting section 4053(8).

#### B. Off-Road Vehicles Lack NHTSA-Required VINs

##### 1. In General

Section 45W(e) provides that no credit can be determined under section 45W(a) with respect to any vehicle unless the taxpayer includes the vehicle identification number of such vehicle on the return of tax for the taxable year. See also section 45W(d)(1), which

requires, among other things, the application of rules similar to those provided in section 30D(f)(8) (“In the case of any vehicle, the credit described in [section 30D](a) shall only be allowed once with respect to such vehicle, as determined based upon the vehicle identification number of such vehicle [. . . .]”); section 30D(f)(9) (“No credit shall be allowed under this section with respect to any vehicle unless the taxpayer includes the vehicle identification number of such vehicle on the return of tax for the taxable year.”); and, the definition of “qualified manufacturer” provided by section 30D(d)(3), incorporated by section 45W(c)(1) by cross-reference to “the requirements of section 30D(1)(C),” which, by definition, requires a qualified manufacturer to enter into a written agreement with the Secretary under which such manufacturer agrees to make periodic written reports to the Secretary providing, among other things, vehicle identification numbers “related to each vehicle manufactured by such manufacturer as the Secretary may require.”

Neither section 45W nor any other section of the Code provides a definition of “vehicle identification number” or “VIN.” See sections 25E, 30D, 45W, 170(f)(12), and 6213(g)(2)(T) through (V). A “vehicle identification number,” as a term of art and in common speech, refers specifically to the series of Arabic numbers and Roman letters (defined in 49 CFR 565.13(a)) that the manufacturer assigns to every motor vehicle in the United States, including imported vehicles, subject to the authority of the National Highway Traffic Safety Administration (NHTSA), an operating administration that is part of the DOT. See 49 CFR 565.10 through 565.14. For this purpose, motor vehicles are vehicles “driven or drawn by mechanical power and manufactured primarily for use on public streets, roads, and highways.” 49 U.S.C. 30101–30102. As a result, manufacturers of off-road vehicles are not required by NHTSA to assign VINs to such vehicles.

To give effect to the parenthetical in section 45W(c)(2)(B) that includes off-road vehicles, therefore, requires a more general understanding of the term “vehicle identification number” as used in section 45W. Such an understanding might encompass other numbering systems, provided that those systems would, if integrated with the NHTSA-required VIN system, allow qualified manufacturers and the IRS to uniquely identify each credit-eligible vehicle for purposes of the qualified manufacturer requirements of section 30D(d)(3) and the one-credit-per-vehicle provision of

section 30D(f)(8)—for example, product identification numbers (PINs) administered by the Society of Automotive Engineers (SAE) or the Association of Equipment Manufacturers (AEM). Compliance with section 30D(d)(3) and (f)(8)—and, thus, the eligibility of any off-road vehicle for the section 45W credit—would depend on the integration of the various “vehicle identification number” systems in question, which would determine eligibility based on either a NHTSA-required VIN or a unique identifier system for vehicles that do not have a NHTSA-required VIN. The IRS must be able to identify each section 45W credit-eligible vehicle based solely on the “vehicle identification number” assigned to the vehicle, and the “vehicle identification number” must be unique across all numbering systems accepted by the IRS for the purpose of administering section 45W. To integrate the unique identifier system with the NHTSA-required VIN, the unique identifier system should be a 17-digit alpha-numeric identifier.

## 2. Potential Integrated System for Vehicle Identification Numbers

The Treasury Department and the IRS are studying various potential options for an integrated system of vehicle identification numbers for purposes of section 45W. Until guidance is published detailing any such future system, vehicles without a NHTSA-required VIN are unable to satisfy the statutory VIN requirement in section 45W(e) and are therefore ineligible for the section 45W credit.

The various potential options under consideration by the Treasury Department and the IRS include the following structural elements:

i. If a qualified commercial clean vehicle has a NHTSA-required VIN, the qualified manufacturer of such vehicle would need to report the NHTSA-required VIN to the IRS for such vehicle to be eligible for the section 45W credit. The taxpayer claiming a section 45W credit for the qualified commercial clean vehicle in such a case would need to report the NHTSA-required VIN on their tax return for the taxable year in which the section 45W credit is claimed for such claim to be valid.

ii. If a qualified manufacturer assigns a PIN to a qualified commercial clean vehicle and that PIN is also a unique 17-digit identifier consisting of a three-digit World Manufacturer Code (WMC) and 14 alpha-numeric characters that follow, the qualified manufacturer would need to provide the PIN to the taxpayer no later than 15 days from the time the identity of the taxpayer purchasing the

vehicle is known, or 15 days from when the taxpayer requests a PIN from the qualified manufacturer, whichever is later. The qualified manufacturer could choose to satisfy this requirement by labeling the PIN on the vehicle, including adding the PIN to the item of specified property by affixing a label to the vehicle or by etching the PIN on the vehicle. Alternatively, a qualified manufacturer could choose to affix a label containing the PIN to the vehicle’s documentation or purchase records. The qualified manufacturer would need to report the PIN and the identity of the taxpayer purchasing the vehicle to the IRS no later than 15 days from the time that the identity of the taxpayer purchasing the vehicle is known for the vehicle to be considered eligible. A taxpayer claiming a section 45W credit in such a case would need to report the PIN on their tax return or information return for the taxable year in which the section 45W credit is claimed for such claim to be valid.

iii. If a qualified commercial clean vehicle does not have a VIN or a PIN issued by a qualified manufacturer, the qualified manufacturer could apply to receive a valid three-digit unique qualified manufacturer identifier (QMID). Upon the issuance of a QMID, the qualified manufacturer would assign unique 17-digit PINs to the qualified commercial clean vehicles it manufactures. Each 17-digit PIN would begin with the QMID followed by 14 alpha-numeric digits that the qualified manufacturer assigns to each vehicle. The qualified manufacturer would need to provide the PIN to the taxpayer no later than 15 days from the time the identity of the taxpayer purchasing the vehicle is known, or 15 days from when the taxpayer requests a PIN from the qualified manufacturer, whichever is later. The qualified manufacturer could choose to satisfy this requirement by labeling the PIN on the vehicles, including adding the PIN to the item of specified property by affixing a label to the vehicle or by etching the PIN on the vehicle. Alternatively, a qualified manufacturer could choose to affix a label containing the PIN to the vehicle’s documentation or purchase records. The qualified manufacturer would need to report the PIN and the identity of the taxpayer purchasing the vehicle to the IRS no later than 15 days from the time that the identity of the taxpayer purchasing the vehicle is known for the vehicle to be considered eligible. A taxpayer claiming a section 45W credit in such a case would need to report the PIN on the taxpayer’s tax return or information return for the taxable year

in which the section 45W credit is claimed for such claim to be valid.

iv. A qualified manufacturer would not be able to set prerequisites for a taxpayer receiving a PIN that are not required to verify the purchase of the qualified commercial clean vehicle, such as requiring taxpayers to sign up for promotional emails, texts, or other communications from the qualified manufacturer, its related entities, or partners. However, qualified manufacturers could choose to provide PINs to taxpayers through the mail, online, email, or other means of electronic delivery. Qualified manufacturers could choose to provide PINs in conjunction with a formal registration for a warranty, provided that the taxpayer could easily obtain the PIN without completing the formal warranty registration.

v. For qualified commercial clean vehicles previously placed in service by another person or entity, a subsequent taxpayer could be required to contact the qualified manufacturer to obtain a PIN.

vi. Qualified manufacturers that manufacture vehicles without a NHTSA-required VIN would need to enter into new qualified manufacturer agreements.

## 3. Vehicles Without a NHTSA-Required VIN Are Not Currently Eligible for the Credit

Eligibility of any off-road vehicle for the section 45W credit is dependent on the issuance of final regulations establishing an integrated vehicle identification number system that accommodates off-road mobile machinery or other vehicles without a NHTSA-required VIN that is sufficient to satisfy the statutory vehicle identification number requirement. This means that off-road mobile machinery without a NHTSA-required VIN is not eligible for the section 45W credit.

## 4. Request for Comments

The Treasury Department and the IRS request comments on the potential integrated vehicle identification number system described in section VII.B2 of this Explanation of Provisions. Specifically, the Treasury Department and the IRS request comments on the following questions:

i. What challenges, if any, would manufacturers have in implementing and complying with the integrated vehicle identification number system described in section VII.B2 of this Explanation of Provisions? What would be the costs and timeline for manufacturers to implement and comply with the proposed system? Are

there cases in which manufacturers or other stakeholders, such as retailers, would decline to employ the system because compliance would be overly burdensome? Commenters are encouraged to specifically identify types and amounts of costs that manufacturers would incur in implementing and complying with the proposed system, as well as specific aspects of the proposal that would require set amounts of time to develop and implement.

ii. Should the Treasury Department and the IRS leverage existing systems, *e.g.* SAE or AEM, that assign WMCs that could be used as the first three digits of the PIN? Are there perceived problems with these systems? Do these systems ensure there is no overlap with any VINs assigned under NHTSA's rules? Are there other PIN tracking systems in place that the IRS could leverage?

iii. If the Treasury Department and the IRS were to implement the integrated vehicle identification number system described in section VII.B2 of this Explanation of Provisions, what changes or exceptions, if any, should be made?

iv. What modifications, if any, could be made to the integrated vehicle identification number system described in section VII.2 of this Explanation of Provisions to accommodate limitations while still adhering to the unique identifier requirement?

v. How would qualified manufacturers furnish PINs to taxpayers (*e.g.*, with the vehicle, through an online website, etc.) in a manner that ensures the taxpayer has easy access to the PIN when filing their tax return or information return? How would off-road vehicle manufacturers obtain and provide information on the identity of those purchasing qualified commercial clean vehicles to assist the IRS in ensuring compliance? What labelling requirements should apply in assigning PINs?

#### C. Manufacturers That Exclusively Manufacture Off-Road Clean Vehicles Are Not Qualified Manufacturers

Section 45W(c)(1) provides, in part, that a qualified commercial clean vehicle must meet the requirements of section 30D(d)(1)(C). Section 30D(d)(1)(C), in turn, provides that a vehicle must be made by a qualified manufacturer. Section 30D(d)(3), incorporated by section 45W(c)(1)'s cross reference to section 30D(d)(1)(C), defines "qualified manufacturer," in part, as any manufacturer within the meaning of the regulations prescribed by the Administrator of the EPA for purposes of the administration of title II of the CAA (42 U.S.C. 7521-7590).

Section 216(1) of the CAA, generally referenced in regulations under title II of the CAA (*see*, for example, 40 CFR 86.082-2(b), 85.1902(f), and 1037.801), defines "manufacturer", in relevant part, as "any person engaged in the manufacturing or assembling of new motor vehicles, new motor vehicle engines, new nonroad vehicles or new nonroad engines, or importing such vehicles or engines for resale . . . ." Section 216(2) of the CAA defines "motor vehicle" as any self-propelled vehicle designed for transporting persons or property on a street or highway. Section 216(11) of the CAA defines "nonroad vehicle" as a vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition. Section 216(10) of the CAA in turn defines "nonroad engine" as an ICE (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition.

Under these definitions, "manufacturer" includes a maker of an off-road vehicle with a "conventional" ICE, a maker of an off-road vehicle with a hybrid engine (to the extent that such vehicle includes an ICE), or a maker of motor vehicles. It does not include a maker of only off-road vehicles with an exclusively electric motor or fuel cell system. Consequently, makers of such off-road vehicles that do not also make any motor vehicles or off-road vehicles with ICEs or hybrid engines cannot be "qualified manufacturers" for purposes of section 45W, and their vehicles are, consequently, ineligible for the credit. This result, which might allow a section 45W credit for an off-road vehicle equipped with a hybrid powertrain but in some cases disallow a credit for a functionally identical vehicle equipped with an electric powertrain, may disadvantage manufacturers who make only products that appear well aligned with the purposes of the credit.

#### D. Some Off-Road Vehicles May Not Display Their Gross Vehicle Weight Ratings

Section 45W(b)(4) provides a limitation for the credit based on the vehicle's GVWR, such that the amount of the section 45W credit does not exceed \$7,500 in the case of a vehicle that has a GVWR of less than 14,000 pounds, and \$40,000 for other vehicles. Similarly, section 45W(c)(3)(A) bases battery capacity requirements applicable to certain vehicles by reference to GVWR: a battery that has a capacity of not less than 15 kilowatt hours (or, in the case of a vehicle that has a GVWR of less than 14,000 pounds, 7 kilowatt hours).

GVWR is not defined in the Internal Revenue Code or any regulations thereunder. However, the DOT and the EPA have defined the term for purposes of regulating motor vehicle safety and emissions. DOT regulations define the term "gross vehicle weight rating" as the value specified by the manufacturer as the loaded weight of a single vehicle. *See* 49 CFR 383.5 and 571.3(b). Similarly, EPA regulations define the term "gross vehicle weight rating" as the value specified by the manufacturer as the maximum design loaded weight of a single vehicle. *See* 40 CFR 86.082-2.

Motor vehicles are required by DOT regulations to be affixed with labels including the GVWR of the vehicle (*see* 49 CFR parts 567 and 568). The only vehicles to which those standards apply are motor vehicles, which are defined in 49 U.S.C. 30102 as "vehicle[s] driven or drawn by mechanical power and manufactured primarily for use on public streets, roads, and highways [ . . . ]" Off-road vehicles may not have a GVWR affixed. It may, therefore, be difficult for taxpayers to determine and substantiate the appropriate credit limitation under section 45W(b)(4).

#### E. Off-Road Vehicles Employing Fuel Cells May Be Ineligible

Section 45W(c)(3)(B) provides that a qualified commercial clean vehicle includes "a motor vehicle which satisfies the requirements under subparagraphs (A) and (B) of section 30B(b)(3) if the vehicle satisfies the other requirements of section 45W(c)." Section 30B(b)(3) defines a "new qualified fuel cell motor vehicle" for purposes of section 30B as a motor vehicle, and provides among other requirements that it be a motor vehicle (A) that is propelled by power derived from 1 or more cells that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel that is stored on board the vehicle in any form and may or may not require reformation prior to use, and (B) that, in the case of a passenger automobile or light truck, has received on or after the date of the enactment of this section a certificate that such vehicle meets or exceeds the Bin 5 Tier II emission level established in regulations prescribed by the Administrator of the EPA under section 202(i) of the CAA for that make and model year vehicle. Section 30B(b)(3)(A) and (B) apply, in the context of section 30B, only to "motor vehicles," a term defined in section 30B(h)(1) to mean "any vehicle which is manufactured primarily for use on public streets, roads, and highways (not including a vehicle operated exclusively

on a rail or rails) and which has at least 4 wheels.” If this definition of “motor vehicle” applies to section 45W(c)(3)(B)—a meaning suggested by that subparagraph’s use of the term “motor vehicle” (which appears nowhere else in section 45W)—then off-road vehicles powered by otherwise eligible fuel-cell technology would be ineligible for the section 45W credit.

#### F. DOT Vehicle Safety Provisions

Section 45W(d)(1) requires, among other things, the application of a rule similar to section 30D(f)(7). Section 30D(f)(7) provides, in part, that a vehicle is not considered eligible for a credit unless such vehicle is in compliance with the motor vehicle safety provisions of 49 U.S.C. 30101 through 30169. As described in section VII.B of this Explanation of Provisions, the grant of authority under those provisions of law do not extend to off-road vehicles. *See* 49 U.S.C. 30101 through 30102. It is unlikely that any off-road vehicle might be, as a factual matter, compliant with safety provisions that, legally, do not apply to it.

However, given the broad scope of vehicles that potentially fall under the category of off-road vehicles for purposes of section 45W, and the scope of the safety provisions provided in 49 U.S.C. 30101 through 30169, identifying similar safety provisions and the criteria by which such similarity might be judged appear to present significant challenges.

#### G. Math Error Authority

Section 6213(g)(2)(v) provides that the term “mathematical or clerical error” means an omission of a correct vehicle identification number required to be included on a return under section 45W(e). As noted in section VII.B of this Explanation of Provisions, treating off-road mobile machinery (as described in the parenthetical in section 45W(c)(2)(B)) as eligible for the 45W credit would require a broad interpretation of the term “vehicle identification number” as that term is used in section 45W(e) and the provisions of section 30D that are incorporated into section 45W through section 45W(d)(1). If the Treasury Department and the IRS were to develop an integrated vehicle identification number system that could accommodate a broad, general definition of the term “vehicle identification number” to encompass off-road mobile machinery in the section 45W context, the Treasury Department and the IRS would propose a conforming amendment to § 301.6213–2. Such an amendment would provide clarity to taxpayers by providing a cross-

reference to this broad, general definition of the term “vehicle identification number.”

#### H. Other Considerations

The proposed regulations may introduce challenges to allowing section 45W credits for off-road vehicles beyond those flowing from the statutory language, particularly in the calculation of incremental cost of off-road vehicles. Determining the residual value of off-road vehicles that have been previously placed in service by another person or entity, the appropriate considerations for identifying a comparable vehicle, and the appropriate RPE or RPEs for purposes of a safe harbor, all present considerable difficulties given the range of vehicles that may fall into the off-road vehicle category.

#### I. Request for Comments

The Treasury Department and the IRS are, in consultation with the DOE, continuing to study these and related questions. The Treasury Department and the IRS request comments on each of the considerations described in section VII.A through H of this Explanation of Provisions related to the eligibility of off-road mobile machinery for the section 45W credit.

#### Proposed Applicability Dates

Proposed §§ 1.45W–1 through 1.45W–5 are proposed to apply to taxable years ending after [date of publication of the final regulations in the **Federal Register**]. Proposed § 1.25E–2(b)(3) is proposed to apply to taxable years ending after [date of publication of the final regulations in the **Federal Register**]. Proposed § 1.30D–2(b)(28)(ii) is proposed to apply to taxable years ending after [date of publication of the final regulations in the **Federal Register**]. The second and third sentences of proposed § 1.6417–6(b)(1) are proposed to apply to property placed in service in taxable years ending after [date of publication of the final regulations in the **Federal Register**].

#### Special Analyses

##### I. Regulatory Planning and Review

Pursuant to the Memorandum of Agreement, Review of Treasury Regulations under Executive Order 12866 (June 9, 2023), tax regulatory actions issued by the IRS are not subject to the requirements of section 6 of Executive Order 12866, as amended. Therefore, a regulatory impact assessment is not required.

##### II. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) (PRA) generally

requires that a Federal agency obtain the approval of the Office of Management and Budget (OMB) before collecting information from the public, whether such collection of information is mandatory, voluntary, or required to obtain or retain a benefit. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid control number assigned by the Office of Management and Budget.

OMB Control Number 1545–2137 covers Form 8936 and Form 8936–A regarding clean vehicle credits, including the requirement to include on the taxpayer’s return for the taxable year the vehicle identification number of the vehicle for which the section 45W credit is claimed. Rev. Proc. 2022–42 and Rev. Proc. 2023–38 describe the procedural requirements for qualified manufacturers to make periodic written reports to the IRS to provide information related to each vehicle manufactured by such manufacturer that is eligible for the section 45W credit as required in section 30D(d)(3). The collections of information contained in Rev. Proc. 2022–42 and Rev. Proc. 2023–38 are described in those documents and were submitted to the Office of Management and Budget in accordance with the PRA under control number 1545–2137. The notice of proposed rulemaking is not changing or creating these already approved collection requirements.

In accordance with § 1.6001–1, a taxpayer claiming a credit under section 45W must keep permanent books of account or records sufficient to establish the amount of any such credit required to be shown by such taxpayer in any return of tax or information. For PRA purposes, general tax records are already approved by OMB under 1545–0074 for individuals, 1545–0123 for business entities, and under 1545–0092 for trust and estate filers. The notice of proposed rulemaking is not changing or creating these already approved collection requirements.

The collections of information in the proposed regulations creates reporting, third-party disclosure and recordkeeping requirements that are necessary to ensure that specified property meets the requirements for the qualified commercial clean vehicle credit under section 45W. These collections of information generally would be used by the IRS for tax compliance purposes and by taxpayers to ensure the vehicle qualifies for the credit.

The reporting requirements include a provision requiring manufacturers to



register with the IRS to become qualified manufacturers, as detailed in § 1.45W–5(c). The third-party disclosure requirement includes the requirement that manufacturers provide taxpayers with a PIN number that identifies the specified property as qualified under section 45W. The likely respondents are businesses and other for-profit entities. The burden for these requirements is as follows:

*Estimated number of respondents:* 4,500.

*Estimated frequency of responses:* 1. *Estimated average annual burden per response:* 0.25 hours.

*Estimated total reporting burden:* 1,125 hours.

The proposed regulations include a third-party disclosure and associated recordkeeping requirements for qualified manufacturers to provide taxpayers with the incremental cost value, which may include detailed cost information for the powertrains, and for taxpayers to keep records of these disclosures, as detailed in § 1.45W–2(c)(10).

The likely respondents are businesses and other for-profit and tax-exempt entities. The burden for these requirements is as follows:

*Estimated number of respondents:* 500.

*Estimated frequency of responses:* 1. *Estimated average annual burden per response:* 1.0 hours.

*Estimated total reporting burden:* 500 hours.

The collections of information contained in this notice of proposed rulemaking have been submitted to the Office of Management and Budget for review in accordance with the Paperwork Reduction Act under OMB Control Number 1545–2137. Commenters are strongly encouraged to submit public comments electronically. Written comments and recommendations for the proposed information collection should be sent to <https://www.reginfo.gov/public/do/PRAMain>, with copies to the IRS. Find this particular information collection by selecting “Currently under Review—Open for Public Comments,” and then by using the search function. Submit electronic submissions for the proposed information collection to the IRS via email at [pra.comments@irs.gov](mailto:pra.comments@irs.gov) (indicate REG–123525–23 on the Subject line). Comments on the collection of information must be received by March 17, 2025.

### III. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) (RFA) imposes certain requirements with respect to

Federal rules that are subject to the notice and comment requirements of section 553(b) of the Administrative Procedure Act (5 U.S.C. 551 *et seq.*) and that are likely to have a significant economic impact on a substantial number of small entities. Unless an agency determines that a proposal will not have a significant economic impact on a substantial number of small entities, section 603 of the RFA requires the agency to present an initial regulatory flexibility analysis (IRFA) of the proposed rule. The Treasury Department and the IRS have not determined whether the proposed rule, when finalized, will have a significant economic impact on a substantial number of small entities. This determination requires further study. However, because there is a possibility of a significant economic impact on a substantial number of small entities, these proposed regulations include an IRFA. The Treasury Department and the IRS invite comments on both the number of entities affected by these proposed regulations and the economic impact of these proposed regulations on small entities.

Small business entities that claim the section 45W credit must satisfy reporting requirements. They will continue to file Form 8936, *Clean Vehicle Credits* (or successor form as the Secretary prescribes), as was the case for the section 45W credit prior to the publication of these proposed regulations. The estimated burden for business taxpayers filing Form 8936 is approved under OMB control number 1545–2137 and 1545–0123.

Although the Treasury Department and IRS estimate that small business entities will claim the credit under section 45W in a given year, the proposed regulations will not have a significant economic impact on such entities because the proposed regulations do not impose any additional burden on taxpayers outside of what is provided by the statute. For example, section 30D(f)(5), which is incorporated into the section 45W regime by section 45W(d)(1), requires the Secretary to prescribe regulations that provide for the recapture of the credit with respect to any property which ceases to be property eligible for such credit. These proposed rules merely provide the framework for the statutorily required recapture.

The Treasury Department and IRS have determined that the continued requirement to file a Form 8936 (or successor form as the Secretary prescribes) is unlikely to involve significant administrative costs beyond what was previously required.

### A. Need for and Objectives of the Rule

The proposed regulations would provide the eligibility rules and key definitions applicable to the section 45W credit to allow taxpayers to know whether the clean vehicle they intend to purchase is eligible for the section 45W credit. In addition, the proposed regulations would provide rules regarding the recapture authority under section 45W(d)(1), so that taxpayers and the IRS would have clear rules regarding when a clean vehicle may cease to be eligible property for purposes of the section 45W credit. Further, the proposed regulations would provide rules for determining the amount of the section 45W credit, including the determination of incremental cost for qualified commercial clean vehicles.

The proposed rules are expected to encourage taxpayers to purchase and place in service qualified commercial clean vehicles, thereby increasing the number of clean vehicles on the roads. Thus, the Treasury Department and the IRS intend and expect that the proposed rules will deliver benefits across the economy and environment that will beneficially impact various industries, including clean vehicle manufacturers and dealers.

### B. Affected Small Entities

The Small Business Administration estimates in its 2023 Small Business Profile that 99.9 percent of United States businesses meet its definition of a small business. The applicability of these proposed regulations does not depend on the size of the business, as defined by the Small Business Administration. As described more fully in the preamble to this proposed regulation and in this IRFA, these rules may affect a variety of different businesses across several different industries, but will primarily affect commercial purchasers of qualified commercial clean vehicles and qualified manufacturers of qualified commercial clean vehicles. The Treasury Department and the IRS currently estimate the number of manufacturers of on-road qualified commercial clean vehicles to be approximately 77, and the number of manufacturers of off-road mobile machinery to be approximately 4,500.

For off-road mobile machinery manufacturer estimates, the Treasury Department and IRS reviewed tax return filings for relevant industry codes for prior taxable years and made assumptions regarding the likelihood of such taxpayers manufacturing electric or hydrogen-powered off-road mobile machinery. For taxpayers that are not likely to meet the definition of small

business entity, the Treasury Department and the IRS assumed that 100 percent would manufacture off-road mobile machinery that may qualify for the credit under section 45W. For taxpayers likely to meet the definition of small business entity, the Treasury Department and the IRS assumed that varying percentages of such taxpayers, based on the size of their operations, would manufacture off-road mobile machinery that may qualify for the credit under section 45W.

Of the estimated 77 manufacturers of on-road qualified commercial clean vehicles, the Treasury Department and the IRS have determined that none of them are small businesses entities. Of the estimated 4,500 manufacturers of off-road mobile machinery, the Treasury Department and the IRS estimate that more than half would likely be considered a small business entity.

The Treasury Department and the IRS expect to receive more information on the impact on small businesses through comments on this proposed rule and again if the integrated system for vehicle identification numbers for purposes of section 45W is established.

#### 1. Impact of the Rules

The recordkeeping and reporting requirements would increase for qualified manufacturers of off-road mobile machinery seeking to become qualified manufacturers in the event of the establishment of an integrated system for vehicle identification numbers. Although the Treasury Department and the IRS do not have sufficient data to precisely determine the likely extent of the increased costs of compliance, the estimated burden of complying with the recordkeeping and reporting requirements are described in the PRA section of the preamble. Based on the total number of estimated manufacturers of off-road mobile machinery (4500) and an estimated registration time of 0.25 hours per registration, the Treasury Department and IRS estimate that off-road mobile machinery manufacturers will spend a total of 1,125 hours registering as qualified manufacturers.

#### 2. Alternatives Considered

The Treasury Department and the IRS considered various alternatives in promulgating these proposed regulations. Significant alternatives and issues considered include: (1) the application of NHTSA rules toward administering vehicle identification numbers; (2) the appropriate length of time for which a vehicle must be used in a trade or business as it relates to the recapture rules provided in proposed

§ 1.45W–4(c); and (3) how best to implement the no double benefit rules and incremental cost calculation to the eligibility of used vehicles for the section 45W credit.

Regarding the application of NHTSA's rules administering vehicle identification numbers compared to an integrated vehicle identification system, the Treasury Department and the IRS considered the appropriate scope of the definition of "vehicle identification number" and how that definition should be consistent with or diverge from the inclusion of and reference to off-road mobile machinery in the statutory text of section 45W(c)(2)(B). The Treasury Department and the IRS considered interpreting the "VIN number" requirement in section 45W(e) to mean a NHTSA-required VIN, consistent with the established definition of "vehicle identification number" in DOT regulations. *See* 49 CFR 565.10 through 565.14. However, the only vehicles regulated by NHTSA are motor vehicles, which are vehicles manufactured primarily for use on public streets, roads, and highways. *See* 49 U.S.C. 30102(7). Thus, off-road vehicles do not have NHTSA-required VINs. Therefore, this interpretation would effectively exclude all off-road mobile machinery, which Congress may have intended to include, as reflected in the parenthetical of section 45W(c)(2)(B).

The Treasury Department and the IRS considered alternatives to the recapture rules provided in proposed § 1.45W–4(c). Given that some taxpayers may consider using vehicles for partial business and partial personal use, the Treasury Department and the IRS determined it was necessary to provide rules regarding when the value of the section 45W credit can be recaptured when the vehicle is used less than 100 percent for trade or business use, other than incidental personal use. The Treasury Department and the IRS also considered the appropriate length of time for which the vehicle must be used in a trade or business. Longer and shorter periods of time were considered. Based on knowledge of commercial vehicle leasing practices (fleet leasing), the Treasury Department and the IRS determined that it was appropriate to require a qualified commercial clean vehicle to be used for 100 percent trade or business use for 18 months after it is placed in service.

The Treasury Department and the IRS considered issues raised by the applicability of the section 45W credit to used vehicles, since the statute does not contain an original use requirement. In particular, the Treasury Department

and the IRS considered how best to implement the statutory no double benefit rules. Section 45W(d)(3) provides that no credit is allowed with respect to any vehicle for which a credit was allowed under section 30D. Section 45W(d)(1), in turn, incorporates section 30D(f)(8), which provides in relevant part that in the case of any vehicle, the credit shall only be allowed once with respect to such vehicle, as determined based upon the vehicle identification number of such vehicle. Section 45W(d)(1) also incorporates the no double benefit rule in section 30D(f)(2). Subsequent buyers of qualified commercial clean vehicles generally would not know if a prior tax credit for clean vehicles had been claimed with respect to a particular used vehicle. In addition, the IRS generally is legally prohibited from disclosing such confidential tax information. Given these constraints and to ensure compliance with the no double benefit rules, a taxpayer claiming such credit must establish that they are entitled to the credit by keeping evidence in their books and records, which may be provided to the IRS upon request, sufficient to establish that no deduction or other credit was previously allowed on such vehicle.

#### 3. Duplicative, Overlapping, or Conflicting Federal Rules

The proposed regulations would not duplicate, overlap, or conflict with any relevant Federal rules. As discussed in the Explanation of Provisions, the proposed regulations would merely provide requirements, procedures, and definitions related to the section 45W credit. The Treasury Department and the IRS invite input from interested members of the public about identifying and avoiding overlapping, duplicative, or conflicting requirements.

#### C. Section 7805(f)

Pursuant to section 7805(f), this notice of proposed rulemaking has been submitted to the Chief Counsel for the Office of Advocacy of the Small Business Administration for comment on their impact on small business.

#### IV. Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 requires that agencies assess anticipated costs and benefits and take certain other actions before issuing a final rule that includes any Federal mandate that may result in expenditures in any one year by a State, local, or Tribal government, in the aggregate, or by the private sector, of \$100 million (updated annually for inflation). These proposed regulations

do not include any Federal mandate that may result in expenditures by State, local, or Tribal governments, or by the private sector in excess of that threshold.

#### V. Executive Order 13132: Federalism

Executive Order 13132 (Federalism) prohibits an agency from publishing any rule that has federalism implications if the rule either imposes substantial, direct compliance costs on State and local governments, and is not required by statute, or preempts State law, unless the agency meets the consultation and funding requirements of section 6 of the Executive order. This proposed rule does not have federalism implications and does not impose substantial direct compliance costs on State and local governments or preempt State law within the meaning of the Executive order.

#### Comments and Public Hearing

Before these proposed amendments to the regulations are adopted as final regulations, consideration will be given to comments regarding the notice of proposed rulemaking that are submitted timely to the IRS as prescribed in the preamble under the **ADDRESSES** section. The Treasury Department and the IRS request comments on all aspects of the proposed regulations. All comments will be made available at <https://www.regulations.gov>. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn.

A public hearing with respect to this notice of proposed rulemaking has been scheduled for April 28, 2025, beginning at 10 a.m. EST in the Auditorium at the Internal Revenue Building, 1111 Constitution Avenue NW, Washington, DC. Due to building security procedures, visitors must enter at the Constitution Avenue entrance. In addition, all visitors must present photo identification to enter the building. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 30 minutes before the hearing starts. Participants may alternatively attend the public hearing by telephone.

The rules of 26 CFR 601.601(a)(3) apply to the public hearing. Persons who wish to present oral comments at the public hearing must submit an outline of the topics to be discussed and the time to be devoted to each topic by March 17, 2025. A period of 10 minutes will be allotted to each person for making comments. An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the

agenda will be available free of charge at the public hearing. If no outline of the topics to be discussed at the public hearing is received by March 17, 2025, the public hearing will be cancelled. If the public hearing is cancelled, a notice of cancellation of the public hearing will be published in the **Federal Register**.

Individuals who want to testify in person at the public hearing must send an email to [publichearings@irs.gov](mailto:publichearings@irs.gov) to have your name added to the building access list. The subject line of the email must contain the regulation number REG-123525-23 and the language TESTIFY In Person. For example, the subject line may say: Request to TESTIFY In Person at Hearing for REG-123525-23.

Individuals who want to testify by telephone at the public hearing must send an email to [publichearings@irs.gov](mailto:publichearings@irs.gov) to receive the telephone number and access code for the public hearing. The subject line of the email must contain the regulation number REG-123525-23 and the language TESTIFY Telephonically. For example, the subject line may say: Request to TESTIFY Telephonically at Hearing for REG-123525-23.

Individuals who want to attend the public hearing in person without testifying must also send an email to [publichearings@irs.gov](mailto:publichearings@irs.gov) to have your name added to the building access list. The subject line of the email must contain the regulation number REG-123525-23 and the language ATTEND In Person. For example, the subject line may say: Request to ATTEND Hearing In Person for REG-123525-23. Requests to attend the public hearing must be received by 5 p.m. EST on April 24, 2025.

Individuals who want to attend the public hearing by telephone without testifying must also send an email to [publichearings@irs.gov](mailto:publichearings@irs.gov) to receive the telephone number and access code for the public hearing. The subject line of the email must contain the regulation number REG-123525-23 and the language ATTEND Hearing Telephonically. For example, the subject line may say: Request to ATTEND Hearing Telephonically for REG-123525-23. Requests to attend the public hearing must be received by 5 p.m. EST on April 24, 2025.

Public hearings will be made accessible to people with disabilities. To request special assistance during a public hearing please contact the Publications and Regulations Section of the Office of Associate Chief Counsel (Procedure and Administration) by sending an email to [\[irs.gov\]\(mailto:publichearings@irs.gov\) \(preferred\) or by telephone at \(202\) 317-6901 \(not a toll-free number\) and must be received by at least April 23, 2025.](mailto:publichearings@</a></p>
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#### Statement of Availability of IRS Documents

Revenue procedures, revenue rulings, notices, and other guidance cited in this preamble is published in the Internal Revenue Bulletin and is available from the Superintendent of Documents, U.S. Government Publishing Office, Washington, DC 20402, or by visiting the IRS website at <https://www.irs.gov>.

#### Drafting Information

The principal authors of these proposed regulations are James Williford, Iris Chung, David Villagrana, and Rika Valdman of the Office of the Associate Chief Counsel (Passthroughs and Special Industries). However, other personnel from the Treasury Department, the DOE, and the IRS participated in their development.

#### List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

#### Proposed Amendments to the Regulations

Accordingly, the Treasury Department and the IRS propose to amend 26 CFR part 1 as follows:

#### PART 1—INCOME TAXES

■ **Paragraph 1.** The authority citation for part 1 is amended by adding entries in numerical order for §§ 1.45W-1 through 1.45W-5 to read in part as follows:

**Authority:** 26 U.S.C. 7805 \* \* \*  
\* \* \* \* \*

Section 1.45W-1 also issued under 26 U.S.C. 45W(f) and 30D(d)(3).

Section 1.45W-2 also issued under 26 U.S.C. 45W(f).

Section 1.45W-3 also issued under 26 U.S.C. 45W(f).

Section 1.45W-4 also issued under 26 U.S.C. 45W(f) and 30D(f)(5).

Section 1.45W-5 also issued under 26 U.S.C. 45W(f).

\* \* \* \* \*

■ **Par. 2.** Section 1.25E-2 is amended by:

- 1. Adding paragraph (b)(3); and
- 2. Revising paragraph (i).

The addition and revision read as follows:

#### § 1.25E-2 Special rules.

\* \* \* \* \*

(b) \* \* \*

(3) *Interaction between section 25E and section 45W credits.* A credit that has been allowed under section 45W of

the Code with respect to a vehicle in a taxable year before the taxable year in which a section 25E credit is allowable for that vehicle does not reduce the amount allowable under section 25E.

\* \* \* \* \*

(i) *Applicability dates*—(1) *In general.* Except as provided in paragraph (i)(2) of this section, this section applies to previously-owned clean vehicles placed in service after December 31, 2022, in taxable years ending after October 10, 2023.

(2) *Paragraph (b)(3) of this section.* Paragraph (b)(3) of this section applies to taxable years ending after [date of publication of the final regulations in the **Federal Register**].

■ **Par. 3.** Section 1.30D-2 is amended by revising paragraphs (b)(28)(ii) and (d) to read as follows:

**§ 1.30D-2 Definitions for purposes of section 30D.**

\* \* \* \* \*

(b) \* \* \*  
(28) \* \* \*

(ii) *Modification of a new motor vehicle.* If a manufacturer modifies a new motor vehicle (as defined in 42 U.S.C. 7550(3)) that does not satisfy the requirements of section 30D(d)(1)(F) or (6) so that the new motor vehicle, after modification, does satisfy such requirements, then such manufacturer may satisfy the requirements of section 30D(d)(3) if the modification occurred prior to the new motor vehicle being placed in service.

\* \* \* \* \*

(d) *Applicability dates*—(1) *In general.* Except as provided in paragraph (d)(2) of this section, this section applies to taxable years ending after December 4, 2023.

(2) *Paragraph (b)(28)(ii) of this section.* Paragraph (b)(28)(ii) of this section applies to taxable years ending after [date of publication of the final regulations in the **Federal Register**].

■ **Par. 4.** Sections 1.45W-0 through 1.45W-5 are added to read as follows: Sec.

\* \* \* \* \*

- 1.45W-0 Table of contents.
- 1.45W-1 Credit for qualified commercial clean vehicles; definitions.
- 1.45W-2 Amount of section 45W credit; incremental cost.
- 1.45W-3 Qualified commercial clean vehicle.
- 1.45W-4 Special rules.
- 1.45W-5 Reporting requirements.

\* \* \* \* \*

**§ 1.45W-0 Table of contents.**

This section lists the captions contained in §§ 1.45W-1 through 1.45W-5.

*§ 1.45W-1 Credit for qualified commercial clean vehicles; definitions.*

- (a) In general.
- (b) Definitions.
  - (1) Battery.
  - (2) Battery electric vehicle or BEV.
  - (3) Fuel cell electric vehicle of FCEV.
  - (4) Gross Vehicle Weight Rating or GVWR.
  - (5) Manufacturer.
  - (6) Placed in service.
  - (7) Plug-in hybrid electric vehicle or PHEV.
  - (8) Plug-in hybrid fuel cell electric vehicle or PHFCEV.
  - (9) Qualified commercial clean vehicle.
  - (10) Qualified manufacturer.
  - (11) Secretary.
  - (12) Section 45W regulations.
  - (13) Statutory references.
    - (i) Chapter 1.
    - (ii) Code.
    - (iii) Subtitle A.
  - (c) Applicability date.

*§ 1.45W-2 Amount of section 45W credit; incremental cost.*

- (a) Per vehicle amount.
- (b) Incremental cost.
  - (1) In general.
  - (2) Manufacturer's cost.
  - (3) Retail price equivalent.
    - (i) In general.
    - (ii) Retail price.
    - (iii) Retail delivered price.
  - (iv) Safe harbor.
- (4) Comparable vehicle.
  - (i) In general.
  - (ii) Gasoline- or diesel-powered vehicle by same manufacturer.
  - (iii) Vehicle comparable in size and use.
  - (iv) Example.
    - (A) Facts.
    - (B) Analysis.
- (c) Incremental cost equations and calculations.
  - (1) ICE powertrain cost.
  - (2) Battery electric vehicles.
  - (3) Plug-in hybrid electric vehicles.
  - (4) Fuel cell electric vehicles.
  - (5) Plug-in hybrid fuel cell electric vehicles.
  - (6) Incremental cost determined exclusive of auxiliary power units.
  - (7) Incremental cost determine inclusive of additional batteries, fuel cells, or hydrogen storage.
  - (8) Negative incremental cost treated as zero.
  - (9) Incremental cost if no comparable vehicle exists.
  - (10) Taxpayer reliance on qualified manufacturer's incremental cost determination.
    - (11) Safe harbor.

- (d) Definitions.
  - (1) Battery.
  - (2) Electric traction drive system and components.
    - (3) Electrical accessories.
    - (4) Engine and engine components.
    - (5) Fuel cell.
    - (6) Hydrogen storage.
    - (7) Hydrogen storage cost.
    - (8) Mechanical accessories.
    - (9) Transmission.
  - (e) Examples.
    - (1) Example 1.
    - (i) Facts.

- (ii) Analysis.
- (2) Example 2.
  - (i) Facts.
  - (ii) Analysis.
- (3) Example 3.
  - (i) Facts.
  - (ii) Analysis.
- (f) Incremental cost of qualified commercial clean vehicle previously placed in service by another person or entity.
  - (1) In general.
  - (2) Age of a qualified commercial clean vehicle previously placed in service by another person or entity.
  - (3) Residual value factor.
  - (4) Example.
    - (i) Facts.
    - (ii) Analysis.
    - (g) Applicability date.

*§ 1.45W-3 Qualified commercial clean vehicle.*

- (a) In general.
- (b) Acquired for use or lease and not for resale by the taxpayer.
  - (1) In general.
  - (2) Recharacterization of lease.
  - (c) Type of vehicle.
    - (1) In general.
    - (2) On-road vehicle.
    - (3) Mobile machinery.
  - (d) Electric motor and battery requirements.
    - (1) In general.
    - (2) Battery capable of being recharged from an external source of electricity.
  - (e) Applicability date.

*§ 1.45W-4 Special rules.*

- (a) No double benefit.
  - (1) Previous allowance of section 45W or 30D credit.
  - (2) Allowance of other deduction or credit.
- (b) Credit ineligibility resulting from certain transactions and uses.
  - (1) In general.
  - (2) Cancelled sale.
  - (3) Vehicle return.
  - (4) Resale.
  - (5) Less than 100 percent trade or business use in taxable year vehicle is placed in service.
    - (c) Recapture.
      - (1) In general.
      - (2) Recapture in the case of less than 100 percent trade or business use.
        - (i) In general.
        - (ii) Applicability to vehicles placed in service by a tax-exempt entity.
      - (d) Elective payment elections.
      - (e) Leases.
      - (f) Applicability date.

*§ 1.45W-5 Reporting requirements.*

- (a) Requirement to file return.
- (b) Credit may generally be claimed on only one tax return.
  - (1) In general.
  - (2) Grantor trusts.
  - (3) Partnerships and S corporations.
  - (c) Taxpayer reliance on manufacturer certifications and periodic written reports to the IRS.
    - (d) Applicability date.

**§ 1.45W-1 Credit for qualified commercial clean vehicles; definitions.**

(a) *In general.* The section 45W regulations (defined in paragraph (b)(12) of this section) apply for purposes of determining the availability and amount of any credit under section 45W of the Internal Revenue Code (Code) with respect to a qualified commercial clean vehicle placed in service by a taxpayer during such taxpayer's taxable year (section 45W credit). Paragraph (b) of this section provides definitions of terms for purposes of applying section 45W and the section 45W regulations. Section 1.45W-2 provides rules for determining the per-vehicle credit amount under section 45W(b). Section 1.45W-3 provides rules related to the definition of *qualified commercial clean vehicle* under section 45W(c). Section 1.45W-4 provides special rules related to section 45W(d). Section 1.45W-5 provides reporting requirements for purposes of section 45W.

(b) *Definitions.* The following definitions apply for purposes of section 45W and the section 45W regulations. For definitions specific to incremental cost calculations, see § 1.45W-2(d).

(1) *Battery.* *Battery* means a collection of one or more battery modules, each of which has two or more battery cells, electrically configured in series or parallel, to create voltage or current. The term *battery* does not include items such as thermal management systems or other parts of a battery cell or module that do not directly contribute to the electrochemical storage of energy within the battery, such as battery cell cases, cans, or pouches.

(2) *Battery electric vehicle or BEV.* *Battery electric vehicle or BEV* means a vehicle propelled solely by an electric motor that draws electricity from batteries capable of being recharged from an external source of electricity.

(3) *Fuel cell electric vehicle or FCEV.* *Fuel cell electric vehicle or FCEV* means a vehicle—

(i) That is propelled by power derived from one or more cells that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel that is stored on board the vehicle in any form and may or may not require reformation prior to use; and

(ii) That, in the case of a light-duty vehicle (that is, a passenger automobile or light truck), has received on or after August 8, 2005 (the date of the enactment of section 30B of the Code), a certificate indicating that such vehicle meets or exceeds the Bin 5 Tier II emission level established in regulations in 40 CFR chapter I prescribed by the Administrator of the Environmental Protection Agency (EPA) under section

202(j) of the Clean Air Act (CAA) (42 U.S.C. 7521(i)) for that make and model year vehicle.

(4) *Gross vehicle weight rating or GVWR.* *Gross vehicle weight rating or GVWR* has the meaning provided in 40 CFR 86.082-2 and 49 CFR 571.3(b).

(5) *Manufacturer—(i) In general.* *Manufacturer* means any manufacturer within the meaning of the regulations in 40 CFR chapter I prescribed by the Administrator of the EPA for purposes of the administration of title II of the CAA (42 U.S.C. 7521 *et seq.*) and as defined in 42 U.S.C. 7550(1). If multiple manufacturers are involved in the production of a vehicle, the requirements of section 30D(d)(3) must be met by the manufacturer that satisfies the reporting requirements of the greenhouse gas emissions standards set by the EPA under the CAA (42 U.S.C. 7521 *et seq.*) for the subject vehicle.

(ii) *Modification of a new motor vehicle.* If a manufacturer modifies a new motor vehicle (as defined in 42 U.S.C. 7550(3)) that does not satisfy the requirements of section 45W(c)(3) so that the vehicle, after modification, does satisfy such requirements, then such manufacturer may satisfy the requirements of section 30D(d)(3) of the Code and § 1.30D-2(b)(28)(i) for purposes of paragraph (b)(5)(i) of this section if the modification occurs prior to the vehicle being placed in service.

(6) *Placed in service.* A qualified commercial clean vehicle is considered to be placed in service on the date the taxpayer takes possession of the vehicle.

(7) *Plug-in hybrid electric vehicle or PHEV.* *Plug-in hybrid electric vehicle or PHEV* means a vehicle that uses batteries that can be recharged from an external source of electricity to power an electric motor that propels the vehicle to a significant extent, and another fuel, such as gasoline or diesel, to power an internal combustion engine or other propulsion source.

(8) *Plug-in hybrid fuel cell electric vehicle or PHFCEV.* *Plug-in hybrid fuel cell electric vehicle or PHFCEV* means a vehicle that uses batteries that can be recharged from an external source of electricity to power an electric motor that propels the vehicle to a significant extent and a hydrogen fuel source that powers an electric motor through the fuel cell system.

(9) *Qualified commercial clean vehicle.* *Qualified commercial clean vehicle* means a vehicle that meets the requirements of section 45W(c) and § 1.45W-3(b) through (d). Vehicles that may qualify as qualified commercial clean vehicles include BEVs, FCEVs, PHEVs, and PHFCEVs. A vehicle does

not meet the requirements of section 45W(c) if—

(i) The qualified manufacturer fails to provide a periodic written report for such vehicle prior to the vehicle being placed in service by the taxpayer claiming the credit that reports the vehicle identification number of such vehicle and certifies compliance with the requirements of section 45W(c);

(ii) The qualified manufacturer provides incorrect information with respect to the periodic written report for such vehicle; or

(iii) The qualified manufacturer fails to update its periodic written report in the event of a material change with respect to such vehicle.

(10) *Qualified manufacturer.* *Qualified manufacturer* means a manufacturer that meets the requirements described in section 30D(d)(3) at the time the manufacturer submits a periodic written report to the Internal Revenue Service (IRS) under a written agreement described in section 30D(d)(3). The term *qualified manufacturer* does not include any manufacturer whose qualified manufacturer status has been terminated by the IRS. The IRS may terminate qualified manufacturer status for fraud, intentional disregard, or gross negligence with respect to any requirements of section 45W, the section 45W regulations, or any guidance under section 45W, including with respect to the periodic written reports described in section 30D(d)(3) and this paragraph (b)(10). The IRS may also terminate qualified manufacturer status for fraud, intentional disregard, or gross negligence with respect to any requirement of section 25E or 30D or any regulations in this chapter or guidance thereunder.

(11) *Secretary.* *Secretary* has the meaning provided in section 7701(a)(11)(B) of the Code.

(12) *Section 45W regulations.* *Section 45W regulations* means this section and §§ 1.45W-2 through 1.45W-5.

(13) *Statutory references—(i) Chapter 1.* *Chapter 1* means chapter 1 of the Code.

(ii) *Code.* *Code* means the Internal Revenue Code.

(iii) *Subtitle A.* *Subtitle A* means subtitle A of the Code.

(c) *Applicability date.* This section applies to qualified commercial clean vehicles placed in service in taxable years ending after [date of publication of the final regulations in the **Federal Register**].

**§ 1.45W-2 Amount of section 45W credit; incremental cost.**

(a) *Per-vehicle credit amount.* Subject to the limitation in section 45W(b)(4) of the Code, the per-vehicle credit amount under section 45W(b)(1) with respect to any qualified commercial clean vehicle is the lesser of 15 percent of the basis of such vehicle (or 30 percent in the case of a vehicle not powered by a gasoline or diesel internal combustion engine (ICE)), or the incremental cost of such vehicle.

(b) *Incremental cost*—(1) *In general.* For purposes of section 45W(b)(2), the incremental cost of any qualified commercial clean vehicle is determined using the incremental cost calculations and equations in paragraph (c) of this section to determine the amount equal to the excess of—

(i) The product of the qualified manufacturer's cost of components necessary for the BEV powertrain, FCEV powertrain, PHEV powertrain, or PHFCEV powertrain used in the vehicle and the retail price equivalent (RPE) of such vehicle; minus

(ii) The product of the manufacturer's cost of components necessary for the powertrain of a comparable vehicle powered solely by a gasoline or diesel ICE and the RPE of such comparable vehicle.

(2) *Manufacturer's cost.* For purposes of this section, a manufacturer's cost includes only its direct manufacturing costs, which may include, but are not limited to, the costs of materials and labor.

(3) *Retail price equivalent*—(i) *In general.* The RPE is the ratio of the manufacturer's suggested retail price (MSRP) of a vehicle to the manufacturer's cost to manufacture such vehicle. The MSRP is the sum of the retail price and the retail delivered price.

(ii) *Retail price.* For purposes of paragraph (b)(3)(i) of this section, *retail price* is the retail price of the vehicle suggested by the manufacturer as described in 15 U.S.C. 1232(f)(1).

(iii) *Retail delivered price.* *Retail delivered price*, for purposes of paragraph (b)(3)(i) of this section, is the retail delivered price suggested by the manufacturer for each accessory or item of optional equipment physically attached to such vehicle at the time of its delivery to the dealer that is not included within the price of such vehicle as stated pursuant to 15 U.S.C. 1232(f)(1), as described in 15 U.S.C. 1232(f)(2).

(iv) *Safe harbor.* The Secretary may publish guidance in the Internal Revenue Bulletin (see § 601.601 of this chapter) no more frequently than

annually that will provide RPE safe harbors for different segments of the vehicle market. Any taxpayer that uses an RPE provided in safe harbor guidance published in the Internal Revenue Bulletin (see § 601.601 of this chapter) to determine the cost of a BEV, PHEV, FCEV, PHFCEV, or ICE powertrain will be deemed to have satisfied the requirements of this paragraph (b)(3), provided all requirements specified in the applicable RPE safe harbor guidance have been met. No formal election is required for a taxpayer to use a safe harbor RPE.

(4) *Comparable vehicle*—(i) *In general.* A comparable vehicle is any vehicle that is powered solely by a gasoline or diesel ICE and is comparable in size and use to the qualified commercial clean vehicle. Except as provided in paragraph (b)(4)(ii) of this section, the manufacturer of the comparable vehicle need not be the manufacturer of the qualified commercial clean vehicle.

(ii) *Gasoline- or diesel-powered vehicle by same manufacturer.* If the qualified manufacturer of a qualified commercial clean vehicle also manufactures a solely gasoline- or diesel-powered ICE version of such vehicle, meaning a vehicle of the same model, produced in the same model year, and with features substantially similar to those of the qualified commercial clean vehicle, such solely gasoline- or diesel-powered vehicle is the only comparable vehicle with respect to such qualified commercial clean vehicle.

(iii) *Vehicle comparable in size and use.* A vehicle is comparable to a qualified commercial clean vehicle in size and use if, as relevant to the particular qualified commercial clean vehicle, it has substantially similar features, such as GVWR, number of doors, towing capacity, passenger capacity, cargo capacity, mounted equipment, drivetrain type, overall width, height and ground clearance, and trim level.

(iv) *Example: Comparable vehicle*—(A) *Facts.* A passenger car with a BEV powertrain (BEV X) that is a qualified commercial clean vehicle has a GVWR of 4,800 pounds, four doors, five-passenger seating capacity, a mid-range trim level, and a 250-horsepower powertrain. A passenger car with an ICE powertrain (ICE Car 1) has a GVWR of 4,500 pounds, four doors, five-passenger seating capacity, a mid-range trim level, and a 200-horsepower powertrain. A second passenger car with an ICE powertrain (ICE Car 2) has a GVWR of 4,500 pounds, two doors, two-passenger

seating capacity, a high-end trim level, and a 250-horsepower powertrain.

(B) *Analysis.* ICE Car 1 is comparable to BEV X because ICE Car 1 and BEV X have substantially similar GVWRs (4,800 pounds compared to 4,500 pounds), numbers of doors (4), passenger capacity (5), and trim levels (mid-range). The fact that ICE Car 1 and BEV X have dissimilar horsepower is not determinative because whether two vehicles are comparable vehicles under the rules of paragraph (b)(4) of this section is not entirely dependent on the performance characteristics of the powertrains. ICE Car 2 and BEV X, which have different numbers of doors (4 compared to 2), passenger capacities (5 compared to 2), and trim levels (mid-range compared to high-end), are not comparable. Therefore, ICE Car 1 is a comparable vehicle for purposes of calculating the incremental cost of BEV X, but ICE Car 2 is not.

(c) *Incremental cost equations and calculations.* The incremental cost equations and calculations set forth in this paragraph (c) apply to determine the incremental cost of a qualified commercial clean vehicle for purposes of section 45W(b)(2) and this section.

(1) *ICE powertrain cost.* For purposes of the equations and calculations in this paragraph (c), the ICE powertrain cost is the sum of the cost of the engine, the ICE transmission, and the mechanical accessories.

(2) *Battery electric vehicles.* In the case of a BEV, the incremental cost of the BEV is the product of the manufacturer's cost of the BEV powertrain and the RPE of such vehicle, less the product of the manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle. The BEV powertrain cost is the sum of the cost of the electric traction drive system (which, for purposes of equation 1 to this paragraph (c)(2), includes the BEV transmission), the battery, and the electrical accessories. Expressed formulaically, the rule is as follows:

Equation 1 to Paragraph (c)(2)

$$\text{Incremental cost of BEV} = (\text{BEV powertrain cost} \times \text{RPE}) - (\text{ICE powertrain cost} \times \text{RPE})$$

(3) *Plug-in hybrid electric vehicles.* In the case of a PHEV, the incremental cost of the PHEV is the product of the manufacturer's cost of the PHEV powertrain and the RPE of such vehicle, less the product of the manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle. The PHEV powertrain cost is the sum of the cost of the engine, the electric traction drive system (which, for

purposes of equation 2 to this paragraph (c)(3), includes the PHEV transmission), the battery, and the electrical accessories. Expressed formulaically, the rule is as follows:

Equation 2 to Paragraph (c)(3)

$$\text{Incremental cost of PHEV} = (\text{PHEV powertrain cost} \times \text{RPE}) - (\text{ICE powertrain cost} \times \text{RPE})$$

(4) *Fuel cell electric vehicles.* In the case of a FCEV, the incremental cost of the FCEV is the product of the manufacturer's cost of the FCEV powertrain and the RPE of such vehicle, less the product of the manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle. The FCEV powertrain cost is the sum of the cost of the fuel cell system, the hydrogen storage, the electric traction drive system (which, for purposes of equation 3 to this paragraph (c)(4), includes the FCEV transmission), the battery, and the electrical accessories. Expressed formulaically, the rule is as follows:

Equation 3 to Paragraph (c)(4)

$$\text{Incremental cost of FCEV} = (\text{FCEV powertrain cost} \times \text{RPE}) - (\text{ICE powertrain cost} \times \text{RPE})$$

(5) *Plug-in hybrid fuel cell electric vehicles.* In the case of a PHFCEV, the incremental cost of the PHFCEV is the product of the manufacturer's cost of the PHFCEV powertrain and the RPE of such vehicle, less the product of the manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle. The PHFCEV powertrain cost is the sum of the cost of the fuel cell system, the hydrogen storage, the electric traction drive system (which, for purposes of equation 4 to this paragraph (c)(5), includes the PHFCEV transmission), the battery, and the electrical accessories. Expressed formulaically, the rule is as follows:

Equation 4 to Paragraph (c)(5)

$$\text{Incremental cost of PHFCEV} = (\text{PHFCEV powertrain cost} \times \text{RPE}) - (\text{ICE powertrain cost} \times \text{RPE})$$

(6) *Incremental cost determined exclusive of auxiliary power units.* The incremental cost of a qualified commercial clean vehicle is determined without regard to any auxiliary power unit installed on such vehicle or on a comparable vehicle.

(7) *Incremental cost determined inclusive of additional batteries, fuel cells, or hydrogen storage.* The incremental cost of a qualified commercial clean vehicle is determined by adding to the cost of the BEV, FCEV, PHEV, or PHFCEV powertrain the cost

of additional batteries installed on such vehicle, regardless of whether such additional batteries are required by a power takeoff, as well as additional fuel cells or additional hydrogen storage installed on such vehicle, regardless of whether such additional fuel cells are required by a power takeoff.

(8) *Negative incremental cost treated as zero.* If the incremental cost calculation results in a negative number, meaning that the cost of the BEV, FCEV, PHEV, or PHFCEV powertrain used in the qualified commercial clean vehicle is less than the cost of the ICE powertrain of a comparable vehicle, then the incremental cost of the qualified commercial vehicle is zero. This paragraph (c)(8) does not affect the availability of the safe harbor described in paragraph (c)(11) of this section.

(9) *Incremental cost if no comparable vehicle exists.* If a taxpayer or manufacturer cannot identify a comparable vehicle with respect to a particular qualified commercial clean vehicle, then the incremental cost of such qualified commercial clean vehicle is zero. This paragraph (c)(9) does not affect the availability of the safe harbor described in paragraph (c)(11) of this section.

(10) *Taxpayer reliance on qualified manufacturer's incremental cost determination.* If a qualified manufacturer provides a taxpayer with written documentation of the incremental cost of a qualified commercial clean vehicle that identifies the comparable vehicle such manufacturer used for the incremental cost calculation and the taxpayer keeps such incremental cost documentation in the taxpayer's records for as long as the period of limitations for the taxable period in which the credit was claimed is open, the taxpayer may rely on such incremental cost for purposes of calculating the amount of the section 45W credit (defined in § 1.45W-1(a)) with respect to such vehicle. See § 1.45W-1(b)(9) for consequences of qualified manufacturer fraud, intentional disregard, or gross negligence with respect to any requirements of section 45W, the section 45W regulations (defined in § 1.45W-1(b)(12)), or any guidance issued by the Secretary under section 45W.

(11) *Safe harbor.* The Secretary may publish guidance in the Internal Revenue Bulletin (see § 601.601 of this chapter) no more frequently than annually that will provide incremental cost safe harbors for different types and classes of qualified commercial clean vehicles placed in service during a specified period. Any taxpayer that uses

an incremental cost safe harbor provided in guidance published in the Internal Revenue Bulletin (see § 601.601 of this chapter) will be deemed to have satisfied the requirements of section 45W(b)(1)(B) and (2) and paragraphs (b) and (c) of this section, provided all requirements specified in the applicable safe harbor guidance have been met. No formal election is required for a taxpayer to use an incremental cost safe harbor.

(d) *Definitions.* This paragraph (d) provides definitions related to the incremental cost rules in section 45W(b)(1)(B) and paragraphs (b) and (c) of this section.

(1) *Battery.* Battery has the meaning provided in § 1.45W-1(b)(1).

(2) *Electric traction drive system and components—(i) Electric traction drive system.* Electric traction drive system means a system used to provide vehicle propulsion in BEVs, FCEVs, PHEVs, and PHFCEVs by delivering torque to the wheels and axle of the vehicle, and includes, but is not limited to, an electric motor, an inverter, and a transmission.

(ii) *Electric motor.* Electric motor means the component that includes the stator, rotor, shaft, housing, bearings, and lubrication elements. Multiple electric motors may be used in a vehicle.

(iii) *Inverter.* Inverter means a component that converts direct current (DC) from the battery into alternating current (AC) to power the electric motor, providing precise control over motor operations.

(iv) *BEV, FCEV, PHEV, and PHFCEV transmission.* For the definition of transmission for BEVs, FCEVs, PHEVs, and PHFCEVs, see paragraph (d)(9)(i) of this section.

(3) *Electrical accessories—(i) In general.* Electrical accessories means accessories that support, but do not independently facilitate, the function of essential vehicle systems, and include, but are not limited to, battery enclosures, a compressor, an electric steering pump, high voltage cables and connections, thermal management systems, and a vacuum pump.

(ii) *Battery enclosures.* Battery enclosures means components that consist of battery cases, cans or pouches, or casings or packaging used to enclose and protect battery cells and modules into a pack.

(iii) *Compressor.* Compressor means a component that powers the air conditioning system, ensuring effective climate control within the vehicle.

(iv) *Electric steering pump.* Electric steering pump means a component that provides hydraulic assistance for the



steering mechanism, enhancing ease of steering and vehicle maneuverability.

(v) *High voltage cables and connections.* *High voltage cables and connections* means components that include all high voltage cables, connections to electric drive units, cables from the onboard charger, DC–DC converter, air compressors, and the charging cable from the charging port to the onboard charger.

(vi) *Thermal management systems.* *Thermal management systems* means components that manage heating and cooling loads to ensure the efficient operation of the battery and electric traction drive system.

(vii) *Vacuum pump.* *Vacuum pump* means a component that is essential for various vehicle systems that require vacuum assistance, contributing to overall system functionality.

(4) *Engine and engine components—*

(i) *Engine.* The *engine* generates power by burning fuel with air inside the engine. The engine includes, but is not limited to, air intake and cooling systems, assembly accessories, core engine components, engine management sensors and electronics, exhaust gas regulator and breather systems, fuel systems, induction air charging and fuel induction systems, power distribution and sensing for after-treatment, primary exhaust and after-treatment modules, and a valve train.

(ii) *Air intake and cooling systems.* *Air intake and cooling systems* means components that ensure adequate airflow for combustion and regulate engine temperature through the use of pumps, pipes, and cooling fans.

(iii) *Assembly accessories.* *Assembly accessories* means auxiliary components that are necessary for the assembly and integration of the powertrain system.

(iv) *Core engine components.* *Core engine components* means components that include the engine cylinder head, crankshaft, and cylinder block, which form the fundamental structure of the engine, facilitating combustion and power generation.

(v) *Engine management sensors and electronics.* *Engine management sensors and electronics* means control units and sensors that monitor and adjust engine parameters to maximize engine performance and minimize emissions.

(vi) *Exhaust gas regulator and breather systems.* *Exhaust gas regulator and breather systems* means components that control the release of exhaust gases and maintain proper ventilation of the engine crankcase.

(vii) *Fuel system.* *Fuel system* means components that encompass fuel storage, distribution, and evaporative

control components, ensuring proper fuel delivery and reducing emissions.

(viii) *Induction air charging and fuel induction systems.* *Induction air charging and fuel induction systems* means components that regulate the intake of air and fuel into the combustion chambers, ensuring efficient mixing and combustion.

(ix) *Power distribution and sensing for after-treatment.* *Power distribution and sensing for after-treatment* means sensors and distribution mechanisms that manage the after-treatment process, ensuring effective emission control.

(x) *Primary exhaust and after-treatment modules.* *Primary exhaust and after-treatment modules* means components that handle the initial expulsion of exhaust gases and subsequent treatment to meet emission standards.

(xi) *Valve train.* *Valve train* means a component that manages the timing and operation of the engine's intake and exhaust valves, optimizing airflow and exhaust processes.

(5) *Fuel cell.* *Fuel cell* means one or more cells in a stack that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel that is stored on board the vehicle in any form and may or may not require reformation prior to use. The fuel cell system includes the stack as well as auxiliary components that include but are not limited to pumps, sensors, heat exchangers, gaskets, compressors, recirculation blowers, or humidifiers.

(6) *Hydrogen storage.* *Hydrogen storage* means storage of hydrogen on board the vehicle in high-pressure tanks as a gas or liquid.

(7) *Hydrogen storage cost.* *Hydrogen storage cost* includes the cost of the tank and the components that manage the flow of hydrogen from the tank to the fuel cell system (that is, hydrogen supply and regulation).

(8) *Mechanical accessories—*(i) *In general.* *Mechanical accessories* are accessories that support, but do not independently facilitate, the function of essential vehicle systems, and include, but are not limited to, a compressor, a mechanical steering pump, and a water pump.

(ii) *Compressor.* *Compressor* means a component that powers the air conditioning system, ensuring effective climate control within the vehicle.

(iii) *Mechanical steering pump.* *Mechanical steering pump* means a component that provides hydraulic assistance to the steering mechanism, reducing the effort required by the driver to turn the steering wheel.

(iv) *Water pump.* *Water pump* means a component that circulates coolant

throughout the engine to maintain optimal operating temperatures and prevent overheating.

(9) *Transmission—*(i) *BEVs, FCEVs, PHEVs and PHFCEVs.* For BEVs, FCEVs, PHEVs, and PHFCEVs, *transmission* means a mechanical device that uses a gear set—two or more gears working together—to change the speed or direction of rotation in a machine. For BEVs and FCEVs (electric vehicles), *transmission* means a component that consists of a single- or multi-speed, single- or multi-reduction gearbox that transfers power from the electric machine to the wheels. For PHEVs and PHFCEVs (plug-in hybrid vehicles), transmission components will depend on the vehicle driveline and orientation of the hybrid system (*i.e.*, parallel or series) and may include, but are not limited to:

(A) Two transmissions (one ICE transmission and one electric vehicle transmission);

(B) One transmission with some components of both ICE and EV transmissions; and

(C) One electric vehicle transmission only.

(ii) *ICE vehicles—*(A) *In general.* For ICE vehicles, *transmission* means a mechanical device that uses a gear set (that is, two or more gears working together) to change the speed or direction of rotation in a machine. For ICE vehicles, a transmission may include, but is not limited to, a case, a drivetrain and geartrain, an internal clutch and torque converter, a lubrication system, a mechanical controls and electronic distribution system, a park-brake mechanism, and a transmission cooling system.

(B) *Case, drivetrain, and geartrain.* *Case, drivetrain, and geartrain* means the mechanical components within the transmission that transfer power from the engine to the wheels, including gears and shafts.

(C) *Internal clutch and torque converter.* *Internal clutch and torque converter* means components that facilitate smooth power transfer and gear changes, enhancing drivability.

(D) *Lubrication system.* *Lubrication system* means components that ensure all moving parts within the transmission are adequately lubricated, reducing friction and wear.

(E) *Mechanical controls and electronic distribution system.* *Mechanical controls and electronic distribution system* means components that manage the operation of the transmission, including gear selection and shifting through both mechanical and electronic means.

(F) *Park-brake mechanism.* *Park-brake mechanism* means a component that ensures the vehicle remains stationary when parked.

(G) *Transmission cooling system.* *Transmission cooling system* means components that prevent overheating of the transmission components, ensuring reliable performance under various operating conditions.

(e) *Examples—(1) Example 1: Incremental cost calculation for a qualified commercial clean vehicle—(i) Facts.* Manufacturer is the qualified manufacturer of a model year 2024 battery electric sport utility vehicle (BEV SUV). The BEV SUV is a qualified commercial clean vehicle with a GVWR of 4,600 pounds. Manufacturer is also the manufacturer of a gasoline-powered ICE SUV (ICE SUV) that, except for the powertrain, is identical to the BEV SUV. Manufacturer's costs of the BEV SUV powertrain components are: electric traction drive system (\$1,881.00), battery (\$12,060.00), and electrical accessories (\$1,437.00). The RPE of the BEV SUV is 1.49. Manufacturer's costs of the ICE SUV powertrain components are: engine (\$5,757.00), transmission (\$1,744.00), and mechanical accessories (\$415.00). The RPE of the ICE SUV is 1.52. In 2025, Taxpayer purchases the BEV SUV for \$50,000 and places the vehicle in service. At the time of Taxpayer's purchase, Manufacturer provides Taxpayer with a written disclosure of Manufacturer's incremental cost calculation, which Manufacturer calculated as described in paragraphs (b) and (c) of this section.

(ii) *Analysis—(A) Calculation of incremental cost.* Under paragraph (b)(1) of this section, the incremental cost of the BEV SUV is the product of Manufacturer's cost of the BEV SUV powertrain and the RPE of such vehicle, less the product of Manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle.

(1) *Step 1.* Under paragraph (c)(2) of this section, the BEV SUV powertrain cost is the sum of the cost of the electric traction drive system (\$1,881.00), the battery (\$12,060.00), and the electrical accessories (\$1,437.00), multiplied by the RPE of the vehicle (1.49), or \$22,913.22.

(2) *Step 2.* Under paragraph (b)(4) of this section, the ICE SUV is the comparable vehicle with respect to the BEV SUV. Under paragraph (c)(1) of this section, the ICE SUV powertrain cost is the sum of the cost of the engine (\$5,757.00), the ICE transmission (\$1,744.00), and the mechanical accessories (\$415.00), multiplied by the RPE of the vehicle (1.52), or \$12,032.32.

(3) *Step 3.* Under paragraph (c)(2) of this section, the incremental cost of the BEV SUV is determined by subtracting the cost of the ICE SUV powertrain in step 2 (\$12,032.32) from the cost of the BEV SUV powertrain in step 1 (\$22,913.22), or \$10,880.90 (\$22,913.22 – \$12,032.32 = \$10,880.90).

(B) *Determination of credit amount.* Under paragraph (c)(10) of this section, Taxpayer may rely on Manufacturer's incremental cost calculation, which is described in paragraphs (b) and (c) of this section, for purposes of determining the amount of the section 45W credit allowable for the BEV SUV. Subject to the limitation in section 45W(b)(4), the credit amount is the lesser of 30 percent of Taxpayer's basis in the BEV SUV (\$50,000.00 × 30% = \$15,000.00) or the incremental cost of the BEV SUV (\$10,880.90). Under section 45W(b)(4), the taxpayer's credit is limited to a maximum of \$7,500.00 because the vehicle has a GVWR of less than 14,000 pounds. Therefore, the allowable section 45W credit with respect to the BEV SUV is \$7,500.00.

(2) *Example 2: Section 45W credit equal to 30 percent of Taxpayer's basis in a qualified commercial clean vehicle—(i) Facts.* The facts are the same as in paragraph (e)(1) of this section (*Example 1*), except that Taxpayer purchases the BEV SUV for \$21,600.00 and the incremental cost calculated by Manufacturer and provided in writing to Taxpayer is \$7,000.00.

(ii) *Analysis.* Under paragraph (c)(10) of this section, Taxpayer may rely on Manufacturer's incremental cost calculation, which is described in paragraphs (b) and (c) of this section, for purposes of determining the amount of the section 45W credit allowable for the BEV SUV. Subject to the limitation in section 45W(b)(4), the credit amount equals the lesser of 30 percent of Taxpayer's basis in the BEV SUV (\$21,600.00 × 30% = \$6,480.00) or the incremental cost of the BEV SUV (\$7,000.00). Because \$6,480.00 is below the \$7,500 limitation in section 45W(b)(4), the allowable section 45W credit with respect to the BEV SUV is \$6,480.00.

(3) *Example 3: Incremental cost limit for a BEV with a GVWR over 14,000 pounds—(i) Facts.* Manufacturer is the qualified manufacturer of a model year 2025 battery electric bus (BEV Bus). The BEV Bus has a GVWR of 14,500 pounds and is a qualified commercial clean vehicle. Manufacturer is also the manufacturer of an ICE Bus that, except for the powertrain, is substantially similar to the BEV Bus. Manufacturer's costs of the BEV Bus powertrain components are: electric traction drive

system (\$4,586.00), battery (\$18,535.00), and electrical accessories (\$2,150.00). The RPE of the BEV Bus is 1.49. Manufacturer's costs of the ICE Bus powertrain components are: engine (\$7,350.00), ICE transmission (\$4,730.00), and mechanical accessories (\$780.00). The RPE of the ICE Bus is 1.52. In 2025, Taxpayer purchases the BEV Bus for \$105,500.00, takes possession of the vehicle, and places it in service that same year. At the time Taxpayer purchases the BEV Bus, Manufacturer provides Taxpayer with a written disclosure of Manufacturer's incremental cost calculation, which Manufacturer calculated in the manner described in paragraphs (b) and (c) of this section.

(ii) *Analysis—(A) Calculation of incremental cost.* Under paragraph (c)(2) of this section, the incremental cost of the BEV Bus is the product of Manufacturer's cost of the BEV Bus powertrain and the RPE of such vehicle, less the product of Manufacturer's cost of the comparable vehicle ICE powertrain and the RPE of such vehicle.

(1) *Step 1.* Under paragraph (c)(2) of this section, the BEV Bus powertrain cost is the sum of the cost of the electric traction drive system (\$4,586.00), the battery (\$18,535.00), and the electrical accessories (\$2,150.00) multiplied by the RPE of the vehicle (1.49), or \$37,653.79.

(2) *Step 2.* Under paragraph (b)(4) of this section, the ICE Bus is the comparable vehicle with respect to the BEV Bus. Under paragraph (c)(1) of this section, the ICE Bus powertrain cost is the sum of the cost of the engine (\$7,350.00), the ICE transmission (\$4,730.00), and the mechanical accessories (\$780.00) multiplied by the RPE of the vehicle (1.52), or \$19,547.20.

(3) *Step 3.* Under paragraph (c)(2) of this section, the incremental cost of the BEV Bus is determined by subtracting the cost of the ICE Bus powertrain (\$19,547.20) from the cost of the BEV Bus powertrain (\$37,653.79), or \$18,106.59 (\$37,653.79 – \$19,547.20 = \$18,106.59).

(B) *Determination of credit amount.* Under paragraph (c)(1) of this section, Taxpayer may rely on Manufacturer's incremental cost calculation, which is described in paragraphs (b) and (c) of this section. Subject to the limitation in section 45W(b)(4), the credit amount is the lesser of 30 percent of Taxpayer's basis in the BEV Bus (\$105,500 × 30% = \$31,650.00) or the incremental cost of the BEV Bus (\$18,106.59). Under section 45W(b)(4), the section 45W credit is limited to \$40,000 for the BEV Bus because it has a GVWR of more than 14,000 pounds. Because \$18,106.59 is

below the \$40,000.00 limitation in section 45W(b)(4), the allowable section 45W credit with respect to the BEV Bus is \$18,106.59.

(f) *Incremental cost of qualified commercial clean vehicle previously placed in service by another person or entity*—(1) *In general.* The incremental cost of a qualified commercial clean vehicle previously placed in service by another person or entity is the product of the incremental cost of the qualified commercial clean vehicle as calculated under paragraphs (b) and (c) of this

section (that is, the incremental cost of such vehicle when new) and the residual value factor that corresponds to the age of the qualified commercial clean vehicle as determined under paragraph (f)(2) of this section.

(2) *Age of a qualified commercial clean vehicle previously placed in service by another person or entity.* The age of a qualified commercial clean vehicle previously placed in service by another person or entity is determined by subtracting the model year of the vehicle from the calendar year in which

the taxpayer places the vehicle in service. For purposes of this paragraph (f)(2) and paragraph (f)(3) of this section, a negative age (for example, a case in which a model year vehicle is sold twice prior to the calendar year that corresponds to that model year) is treated as zero.

(3) *Residual value factor.* The residual value factor described in paragraph (f)(1) of this section applicable to relevant vehicle classes, based on GVWR, is as provided in the following tables:

TABLE 1 TO PARAGRAPH (f)(3)

Vehicle class and description	GVWR (lbs.)
Class 1 Passenger car	<14,000
Class 1 or 2–3 Light Truck (Van, Sport Utility Vehicle, Pickup Truck)	<14,000
Class 4–5	14,000–19,500
Class 6	19,500–26,000
Class 7–8 Box/Other	26,000–60,000
Class 8 Day Cab/Sleeper	>33,000

TABLE 2 TO PARAGRAPH (f)(3)

Vehicle class/vehicle age	Class 1 passenger car (%)	Class 1 or 2–3 light truck (%)	Class 4–5 (%)	Class 6 box (%)	Class 7–8 box/other (%)	Class 8 day cab/sleeper (%)
0 years	70	75	95	90	95	85
1 year	60	70	85	80	85	75
2 years	55	60	80	70	80	60
3 years	50	55	75	60	70	55
4 years	40	45	70	55	65	45
5 years	40	40	65	45	60	40
6 years	35	35	60	40	55	35
7 years	30	35	55	35	50	30
8 years	25	30	50	35	45	25
9 years	25	25	45	30	45	25
10 years	20	25	45	25	40	20
11 years	20	20	40	25	35	20
12 years	15	20	40	20	35	15
13 years	15	15	35	20	30	15
14 or more years	10	15	35	15	30	15

(4) *Example*—(i) *Facts.* In December 2024, X purchases and places in service a model year 2025 battery electric car (BEV car). The BEV car is a qualified commercial clean vehicle and has a GVWR of 3,900 pounds and an incremental cost of \$15,000. X did not claim a section 45W credit with respect to the BEV car. X sells the BEV car to Y in December 2025 for \$40,000. Y is a fiscal year taxpayer whose taxable year begins on October 1.

(ii) *Analysis.* Under paragraph (f)(2) of this section, the BEV car is 0 years old because the model year of the BEV car (2025) subtracted from the calendar year Y placed the BEV car in service (2025) equals 0. Neither the calendar year in which X places the BEV car in service nor Y's fiscal year is relevant to

determining the age of the BEV car for purposes of paragraph (f)(2) of this section. The applicable residual value factor under paragraph (f)(3) of this section is therefore 70%. The incremental cost of the BEV car is \$10,500 (\$15,000 × 70%). Because the incremental cost of the BEV car (\$10,500) is less than 30% of Y's basis in the vehicle (\$40,000 × 30% = \$12,000), \$10,500 is the amount determined under section 45W(b)(1). Under section 45W(b)(4), the allowable section 45W credit for the BEV car is limited to \$7,500 because the BEV car has a GVWR of less than 14,000 pounds. Therefore, Y's allowable section 45W credit with respect to the BEV car is \$7,500.

(g) *Applicability date.* This section applies to qualified commercial clean vehicles placed in service in taxable years ending after [date of publication of the final regulations in the **Federal Register**].

**§ 1.45W–3 Qualified commercial clean vehicle.**

(a) *In general.* To qualify as a qualified commercial clean vehicle for purposes of section 45W of the Code, a vehicle must meet the requirements of section 45W(c) and paragraphs (b) through (d) of this section.

(b) *Acquired for use or lease and not for resale by the taxpayer*—(1) *In general.* Under section 45W(c)(1), a qualified commercial clean vehicle must be acquired for use or lease and not for

resale by the taxpayer. For purposes of section 45W(c)(1), a taxpayer that is not a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv) of the Code acquires a vehicle for use or lease if the taxpayer acquires the vehicle for use or lease in a trade or business of the taxpayer.

(2) *Recharacterization of lease.* If a lease of a qualified commercial clean vehicle would be treated as a sale rather than a lease for purposes of subtitle A, such lease will not be respected for purposes of section 45W(c)(1). In such case, the lessor will be treated as having acquired the vehicle for resale, and no credit will be allowed to such lessor under section 45W with respect to the vehicle. To the extent the lessor has claimed a section 45W credit (defined in § 1.45W-1(a)) with respect to such vehicle, the recapture rules in § 1.45W-4(c) apply.

(c) *Type of vehicle*—(1) *In general.* Under section 45W(c)(2), a qualified commercial clean vehicle must be either an on-road vehicle, as described in section 45W(c)(2)(A) and paragraph (c)(2) of this section, or mobile machinery, as described in section 45W(c)(2)(B) and paragraph (c)(3) of this section. Some vehicles, such as a digger derrick truck, may qualify as both an on-road vehicle and mobile machinery.

(2) *On-road vehicle.* An *on-road vehicle* is a vehicle that meets the requirements of section 30D(d)(1)(D) of the Code (that is, the vehicle is treated as a motor vehicle for purposes of title II of the Clean Air Act), is manufactured primarily for use on public streets, roads, and highways (not including a vehicle operated exclusively on a rail or rails).

(3) *Mobile machinery.* *Mobile machinery* has the meaning provided in section 4053(8) of the Code.

(d) *Electric motor and battery requirements*—(1) *In general.* Under section 45W(c)(3), a qualified commercial clean vehicle must be propelled to a significant extent by an electric motor that draws electricity from a battery that has a capacity of not less than 15 kilowatt hours (or, in the case of a vehicle that 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, or is a motor vehicle that satisfies the requirements under section 30B(b)(3)(A) and (B).

(2) *Battery capable of being recharged from an external source of electricity.* For purposes of section 45W(c)(3)(A), a battery is capable of being recharged from an external source of electricity if such source of electricity is not an integral part of the vehicle. For example,

a regenerative braking system, in which the kinetic energy generated by the motion of the vehicle is used to recharge a battery, is not an external source of electricity for purposes of section 45W(c)(3)(A) and this paragraph (d)(2).

(e) *Applicability date.* This section applies to taxable years ending after [date of publication of the final regulations in the **Federal Register**].

#### § 1.45W-4 Special rules.

(a) *No double benefit*—(1) *Previous allowance of section 45W or 30D credit.* No credit is allowed under section 45W(a) of the Code (section 45W credit) with respect to any vehicle for which a section 45W credit or a section 30D credit was previously allowed for such vehicle.

(2) *Allowance of other deduction or credit.* Under sections 45W(d)(1) and 30D(f)(2) of the Code, the amount of any deduction or other credit allowable under chapter 1 of the Code (chapter 1) for a vehicle for which a section 45W credit is allowable must be reduced by the amount of the section 45W credit allowed for such vehicle. *See also* § 1.25E-2(b)(1).

(3) *Recordkeeping for the qualified commercial clean vehicle credit.* In accordance with § 1.6001-1, a taxpayer claiming a credit under section 45W must keep permanent books of account or records sufficient to establish the amount of any such credit required to be shown by such taxpayer in any return of tax or information return. Such records must be sufficient to establish, for example, that the section 45W credit claimed is not disallowed by paragraph (a)(1) of this section, subject to reduction under § 1.25E-2(b)(1), or, if any such reduction is required, the amount of such reduction.

(b) *Credit ineligibility resulting from certain transactions and uses*—(1) *In general.* This paragraph (b) provides rules that apply to certain transactions involving qualified commercial clean vehicles and certain uses of such vehicles, including cancelled sales, vehicle returns, resales, or less than 100 percent use in a trade or business.

(2) *Cancelled sale.* If a sale of a qualified commercial clean vehicle is cancelled before the taxpayer places the vehicle in service, then—

(i) The taxpayer may not claim the section 45W credit with respect to the vehicle;

(ii) The vehicle may still be eligible for the section 45W credit; and

(iii) A subsequent buyer of the vehicle will not be required to apply the residual value rules of § 1.45W-2(f) to determine the incremental cost of the vehicle.

(3) *Vehicle return.* If a taxpayer returns a qualified commercial clean vehicle to the seller within 30 days of placing such vehicle in service, then—

(i) The taxpayer may not claim the section 45W credit with respect to the vehicle;

(ii) The vehicle may still be eligible for the section 45W credit; and

(iii) A subsequent buyer of the vehicle must apply the residual value rules of § 1.45W-2(f) to determine the incremental cost of the vehicle.

(4) *Resale.* If a taxpayer resells a qualified commercial clean vehicle within 30 days of placing the vehicle in service, then—

(i) The taxpayer is treated as having acquired such vehicle with the intent to resell;

(ii) The taxpayer may not claim the section 45W credit with respect to the vehicle;

(iii) The vehicle may still be eligible for the section 45W credit; and

(iv) A subsequent buyer of the vehicle must apply the residual value rules of § 1.45W-2(f) to determine the incremental cost of the vehicle.

(5) *Less than 100 percent trade or business use in taxable year vehicle is placed in service.* If a taxpayer's trade or business use of a qualified commercial clean vehicle for the taxable year such vehicle is placed in service by the taxpayer is less than 100 percent of the taxpayer's total use of that vehicle for that taxable year (other than incidental personal use, such as a stop for lunch on the way between two job sites), including because the vehicle is sold or otherwise disposed of, the vehicle is ineligible for the section 45W credit. This rule also applies to a qualified commercial clean vehicle placed in service by a tax-exempt entity, except that 100 percent trade or business use means the tax-exempt entity's use that is related to an exempt purpose or an unrelated trade or business purpose.

(c) *Recapture*—(1) *In general.* This paragraph (c) provides rules regarding the recapture of the section 45W credit pursuant to sections 45W(d)(1) and 30D(f)(5).

(2) *Recapture in the case of less than 100 percent trade or business use*—(i) *In general.* Except as provided in paragraph (c)(2)(ii) of this section, if a taxpayer ceases to use a qualified commercial clean vehicle for 100 percent trade or business use (other than incidental personal use) during the 18-month period beginning on the date the vehicle is placed in service, including because the vehicle is sold or otherwise disposed of, then—

(A) The taxpayer may not claim the section 45W credit with respect to the

vehicle. If the taxpayer has already claimed the section 45W credit, the credit is recaptured as a tax under chapter 1.

(B) The vehicle may still be eligible for the section 45W credit; and

(C) A subsequent buyer must apply the residual value rules of § 1.45W-2(f)(3) to determine the incremental cost of the vehicle.

(ii) *Applicability to vehicles placed in service by a tax-exempt entity.* For a qualified commercial clean vehicle placed in service by a tax-exempt entity, the 100 percent trade or business use rule in paragraph (c)(2)(i) of this section applies, except that, as provided in paragraph (b)(5) of this section, 100 percent trade or business use means the tax-exempt entity's use that is related to an exempt purpose or an unrelated trade or business purpose.

(d) *Elective payment elections.* In the case of an applicable entity, as described in section 6417(d)(1) of the Code and § 1.6417-1(c) with respect to which an applicable credit listed in section 6417(b) is determined for a taxable year, section 6417(a) allows the applicable entity to make an election to treat the applicable entity as making a payment against the tax imposed by subtitle A of the Code equal to the amount of the applicable credit. Section 6417(b)(6) and § 1.6417-1(d)(6) include the section 45W credit as an applicable credit, but only with respect to a section 45W credit determined by reason of section 45W(d)(2) by a tax-exempt entity described in section 168(h)(2)(A)(i), (ii), or (iv) that is also an applicable entity listed in section 6417(d)(1) and § 1.6417-1(c).

(e) *Leases.* For purposes of section 45W(d)(2), a vehicle is subject to a lease if it is leased within 30 days of being placed in service by a tax-exempt entity.

(f) *Applicability date.* This section applies to taxable years ending after [date of publication of the final regulations in the **Federal Register**].

**§ 1.45W-5 Reporting requirements.**

(a) *Requirement to file return.* No section 45W credit (defined in § 1.45W-1(a)) can be determined unless the taxpayer claiming such credit files a Federal income tax return or information return, as appropriate, for the taxable year in which the qualified commercial clean vehicle is placed in service. The taxpayer must attach to such return a completed Form 8936, *Clean Vehicle Credits*, or successor form, that includes all information

required by the form and instructions. The taxpayer must also attach a completed Schedule A (Form 8936), *Clean Vehicle Credit Amount*, or successor form or schedule, that includes all information required by the schedule and instructions, including the vehicle identification number of the qualified commercial clean vehicle.

(b) *Credit may generally be claimed on only one tax return—(1) In general.* Except as provided in paragraphs (b)(2) and (3) of this section, the amount of the section 45W credit attributable to a qualified commercial clean vehicle may be claimed on only one Federal income tax return, including on a joint return in which one of the spouses or the spouse's wholly-owned business entity is listed on the title as the sole owner of the vehicle. In the event a qualified commercial clean vehicle is placed in service by multiple taxpayers that do not file a joint tax return (for example, in the case of married individuals filing separate returns), no allocation or proration of the section 45W credit is available.

(2) *Grantor trusts.* In the case of a qualified commercial clean vehicle placed in service by a trust, to the extent the grantor or another person is treated as owning all or part of the trust under sections 671 through 679 of the Code, the section 45W credit is allocated to such grantor or other person in accordance with § 1.671-3(a)(1).

(3) *Partnerships and S corporations.* In the case of a qualified commercial clean vehicle placed in service by a partnership or S corporation, the section 45W credit is allocated among the partners of the partnership under § 1.704-1(b)(4)(ii) or among the shareholders of the S corporation under sections 1366(a) and 1377(a) of the Code and claimed on the tax returns of the ultimate partners or of the S corporation shareholder(s).

(c) *Taxpayer reliance on manufacturer certifications and periodic written reports to the IRS.* A taxpayer that acquires a qualified commercial clean vehicle and places it in service may rely on the information and certifications contained in the qualified manufacturer's written reports to the IRS. The procedures for such periodic written reports are established in guidance published in the Internal Revenue Bulletin (see § 601.601 of this chapter). To the extent a taxpayer relies on certifications or attestations from the qualified manufacturer, the qualified commercial clean vehicle the taxpayer

acquires will be deemed to meet the requirements of sections 30D(d)(1)(C) and 45W(c)(1) of the Code.

(d) *Applicability date.* This section applies to taxable years ending after [date of publication of the final regulations in the **Federal Register**].

■ **Par. 5.** Section 1.6417-6 is amended by:

- 1. Adding two sentences to the end of paragraph (b)(1); and
- 2. Revising paragraph (e).

The addition and revision read as follows:

**§ 1.6417-6 Special rules.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \* For purposes of this paragraph (b)(1), if an applicable credit is subject to section 50, then section 50 applies without regard to section 50(b)(3) and (b)(4)(A)(i). If another provision of the Code contains a basis reduction and/or recapture provision outside of section 50 that impacts the available credit (such as sections 30C(e), 45Q(f)(4), 45W(d)(1), and 48(a)(10)), then the rules of that provision of the Code and the regulations in this chapter issued under that provision of the Code apply, except that any applicable credit continues to be determined without regard to section 50(b)(3) and (b)(4)(A)(i) and by treating any property with respect to which such credit is determined as used in a trade or business of the applicable entity, consistent with section 6417(d)(2) and § 1.6417-2(c).

\* \* \* \* \*

(e) *Applicability dates—(1) In general.* Except as provided in paragraph (e)(2) of this section, this section applies to taxable years ending on or after March 11, 2024. For taxable years ending before March 11, 2024, taxpayers, however, may choose to apply the rules of §§ 1.6417-1 through 1.6417-4 and this section, provided the taxpayers apply the rules in their entirety and in a consistent manner.

(2) *Paragraph (b)(1) of this section.* The second and third sentences of paragraph (b)(1) of this section apply to property placed in service in taxable years ending after [date of publication of the final regulations in the **Federal Register**].

**Douglas W. O'Donnell,**  
*Deputy Commissioner.*

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