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KPMG report: Proposed regulations on advanced manufacturing production credit under section 45X

The U.S. Treasury Department and IRS on December 14, 2023, released proposed regulations on the advanced manufacturing tax credit under section 45X.

The 45X credit was established by the “Inflation Reduction Act of 2022” and intends to incentivize taxpayers to produce eligible solar, wind, and battery components in a manner that contributes to the development of domestic supply chains. The advanced manufacturing production credit (section 45X credit) is a production tax credit and is based on the number of eligible components produced and sold by such taxpayer to an unrelated person as a part of the taxpayer’s a trade or business.

1.45X-1 general rules

The statute provides a credit amount associated with each eligible component. Generally, the credit is equal to the sum of the credit amounts provided in the statute under section 45X(b) with respect to each eligible component that is produced by the taxpayer and, within the tax year, sold by the taxpayer to an unrelated person.

Definition of “produced by the taxpayer”

The term produced by the taxpayer means a process conducted by the taxpayer that substantially transforms constituent elements, materials, or subcomponents into a complete and distinct eligible component that is functionally different from that which would result from mere assembly or superficial modification of the elements, materials, or subcomponents. The term produced by the taxpayer does not include partial transformation that does not result in substantial transformation of constituent elements, materials, or subcomponents into a complete and distinct eligible component. The term produced by the taxpayer also does not include minor assembly of two or more constituent elements, materials, or subcomponents, or superficial modification of the final eligible component, if the taxpayer does not also engage in the process resulting in a substantial transformation.

For solar grade polysilicon, electrode active materials, and applicable critical minerals, the term produced by the taxpayer means processing, conversion, refinement, or purification of source materials, such as brines, ores, or waste streams, to derive a distinct eligible component.

The proposed regulations clarify that constituent elements, materials and subcomponents used in the production of eligible components are not required to be produced in the United States.

KPMG observation

The Proposed Regulations provide several examples to illustrate how various taxpayer activities align with these definitions in a wind and battery context. Based on the definitions and the examples provided, it may be necessary to carefully evaluate production processes to understand the impact of the definition of “produced” Provided in the Proposed Regulations.

Contract manufacturing

If the production of an eligible component is performed in whole or in part subject to a contract that is a contract manufacturing arrangement, then the party to such contract that may claim the section 45X credit with respect to such eligible component, provided all other requirements in section 45X are met, is the taxpayer that performs the actual production activities that bring about a substantial transformation resulting in the eligible component.

If an eligible component is produced by a taxpayer pursuant to a contract manufacturing arrangement, the parties to such agreement may determine by agreement the party that may claim the section 45X credit. If a taxpayer enters into contract manufacturing arrangements with multiple fabricators to produce an eligible component, the parties to such agreements may determine by agreement the party that may claim the section 45X credit. The IRS will not challenge the agreement of the parties provided all the parties submit signed certification statements indicating that all parties agree as to the party that may claim the section 45X credit.

KPMG observation

Prior to the issuance of the Proposed Regulations, there had been speculation that in the contract manufacturing context section 45X guidance would look to indices of control over the production process, economic risks, title to produced goods, etc. The Proposed Regulations instead provide a clear cut rule on the identity of the credit claimant, while also allowing for flexibility among the parties to these arrangements.

Timing and production and sale

The Proposed Regulations clarify that the production of eligible components for which a taxpayer is claiming a section 45X credit may begin before December 31, 2022. Production of eligible components must be completed, and sales of eligible components must occur, after December 31, 2022.

KPMG observation

This is welcome news to taxpayers who have been estimating 2023 tax benefits. This is consistent with the colloquy on the Senate floor between Senator Warner and Senator Wyden.

Eligible components must be produced within the United States, but constituent elements, materials, and subcomponents used in the production of eligible components are not subject to the domestic production requirement.

A taxpayer may claim a section 45X credit for each eligible component the taxpayer produces and sells to an unrelated person, including any eligible component that is part of another complete and distinct eligible component or another complete and distinct product (that is not itself an eligible component) that the taxpayer also produces and sells to an unrelated person. For instance, if a domestic taxpayer produces eligible battery modules in 2023, and integrates them into an electric vehicle (not an eligible component), the taxpayer would be eligible for the credit in the tax year that the electric vehicle is sold

to an unrelated third party. Therefore, if the electric vehicle is sold to an unrelated party in 2024, the taxpayer would be entitled to the credit for the eligible module in 2024.

Interplay with 48C

A section 45X facility includes all tangible property that comprises an independently functioning production unit that produces one or more eligible components, meaning the property that substantially transforms the material inputs.

A section 48C facility includes all eligible property included in a qualifying advanced energy project for which a taxpayer receives an allocation of section 48C credits and *claims* such credits after August 16, 2022.

An eligible component for the purposes of calculating the 45X credit, must be produced by a section 45X facility; and doesn't include any property that is produced at a facility if the basis is eligible and taken into account for the credit allowed under section 48C.

The Proposed Regulations provide various examples to illustrate these definitions.

Anti-abuse rule

The section 45X credit is not allowable if the primary purpose of the production and sale of an eligible component is to obtain the benefit of the section 45X credit in a manner that is wasteful, such as discarding, disposing of, or destroying the eligible component without putting it to a productive use. A determination of whether the production and sale of an eligible component is inconsistent with the purposes of the credit is based on all facts and circumstances. This will require taxpayers to maintain documentation regarding the intended use of the product as it makes its way through the supply chain.

1.45X-2 sale to unrelated person

A taxpayer may make an election (Related Person Election), to treat a sale of eligible components by such taxpayer to a related person as if made to an unrelated person. A taxpayer must make an affirmative Related Person Election annually on the taxpayer's timely filed original Federal income tax return, including extensions. A separate Related Person Election must be made with respect to related person sales made by a taxpayer for each eligible trade or business of the taxpayer.

For all sales of eligible components to related persons, the taxpayer must provide all required information set forth in guidance. This may include, the taxpayer's name, employer identification number (EIN), a description of the taxpayer's trade or business (including principal business activity code); the name(s) and EINs of all related persons; a listing of the eligible components that are sold; and the intended purpose of any sales of eligible components to or from related persons.

KPMG observation

A key benefit of the Related Person Election appears to be timing. When a Related Person Election is made the taxpayer who produces and sells an eligible component to a related entity may claim the credit in the year of the sale to the related entity. Absent the Related Party Election, the taxpayer could only claim the credit if and when the related entity sells the eligible component (or item into which the component is integrated) to an unrelated person.

1.45X-3 eligible components

An eligible component is any solar energy component, any wind energy component, any inverter, any qualifying battery component, and any applicable critical mineral. A number of the eligible components simply adopted the statutory definitions. However, here, we have listed where the proposed regulations provide further direction.

Related offshore wind vessel

The Proposed Regulations clarify that the sales price of the vessel does not include the price of maintenance, services, or other similar items that may be sold with the vessel. Also, a related party election should not cause the sale price of such vessel to be treated as having been determined with respect to a transaction between uncontrolled taxpayers.

Electrode active materials

The Proposed Regulations provide that electrode active materials do not include battery management systems, terminal assemblies, cell containments, gas release valves, module containments, module connectors, compression plates, straps, pack terminals, bus bars, thermal management systems, and pack jackets. Additionally, costs incurred by the taxpayer with respect to production of electrode active materials includes all costs as defined in §1.263A-1(e) that are paid or incurred by the taxpayer for the production of an electrode active material only, *except* direct materials costs, or indirect materials costs and any costs related to the extraction of raw materials.

Critical minerals

Costs incurred by the taxpayer with respect to the production of applicable critical minerals includes all costs as defined in §1.263A-1(e) that are paid or incurred by the taxpayer for the production of an applicable critical mineral only, *except* direct or indirect materials costs and any costs related to the extraction of raw materials.

KPMG observation

Taxpayers have been eagerly awaiting the definition of the term “production” for the purposes of calculating the credit for both electrode active materials and critical minerals. Depending on where the taxpayer is in the supply chain, the direct and indirect materials costs is a significant portion of the cost of goods sold. Thus, the exclusion of these costs will result in a far less favorable credit than anticipated for some.

Substantiation

The Proposed Regulations introduced substantiation requirements for taxpayers claiming credits for the productions of certain eligible components. For instance, with respect to solar components, including photovoltaic cells, wafers, and solar modules, the taxpayer must document the capacity of a photovoltaic cell in a bill of sale or design documentation, such as an International Electrotechnical Commission certification.

For blades, nacelles, offshore wind foundations, or towers, a taxpayer must document the turbine model for which the component is designed and the total rated capacity of the completed wind turbine in technical documentation associated with the sale of the component.

For taxpayers producing and selling eligible inverters, the taxpayer must document that the inverter meets the core engineering specifications for use in its intended function, the inverter’s rated output, and the inverter’s capacity in a specification sheet, bill of sale, or other similar documentation.

Lastly, the taxpayer must document that an applicable critical mineral meets the requirements of section 45X(c)(6) with a certificate of analysis provided by the taxpayer to the person to which the taxpayer sold the applicable critical mineral.

The proposed regulations provide that all such substantiation would be part of the general requirements in the Code relating maintaining documentation supporting income, credits, deduction, etc.

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