



November 4, 2022

SUBMITTED ELECTRONICALLY

Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-51)
Room 5203
P.O. Box 7604, Ben Franklin Station
Washington, D.C. 20044

The Honorable Lily L. Batchelder
Assistant Secretary for Tax Policy
Department of Treasury

Mr. William M. Paul
Principal Deputy Chief Counsel
and Deputy Chief Counsel
Internal Revenue Service

Re: Request for Comments on Prevailing Wage, Domestic Content, and Energy Communities Requirements Under the Act Commonly Known as the Inflation Reduction Act of 2022 (Notice 2022-51)

Dear Ms. Batchelder and Mr. Paul:

Corning Incorporated ("Corning") and Hemlock Semiconductor ("HSC") are pleased to submit comments with respect to Treasury Notice 2022-51 regarding the provisions of §§30C, 45, 45L, 45Q, 45U, 45V, 45Y, 45Z, 48, 48C, 48E, and 179D of the Internal Revenue Code (Code), as amended or added by Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA).

I. Background

Corning is one of the world's leading innovators in materials science. For nearly 170 years, Corning has applied its unparalleled expertise in glass science, ceramic science, and optical physics to develop products that transform industries and enhance people's lives. We accelerate and transform life sciences, mobile consumer electronics, optical communications, display, and automotive markets. We are changing the world with trusted products that

accelerate drug discovery, development, and delivery to save lives; damage-resistant cover glass to enhance the devices that keep us connected; optical fiber, wireless technologies, and connectivity solutions to carry information and ideas at the speed of life; precision glass for advanced displays to deliver richer experiences; and auto glass and ceramics to drive cleaner, safer, and smarter transportation. Corning is headquartered in the United States and employs approximately 61,000 employees world-wide.

In addition, Corning is the majority owner of Hemlock Semiconductor (HSC). HSC manufactures hyper-pure polycrystalline silicon – the foundational component for the semiconductor and solar supply chains. Polysilicon is the semiconductor in a semiconductor chip. HSC polysilicon is also used in the manufacture of ultra-low-carbon solar panels. As the only producer of hyper-pure polysilicon headquartered in the United States, HSC has been a leader in polysilicon manufacturing since beginning its operations in 1961. HSC’s experience and technology have allowed it to develop a safe, efficient, sustainable, and cost-effective manufacturing process. HSC puts a strong emphasis on public safety and takes pride in being an involved and active community leader in the Great Lakes Bay Region of Michigan.

As the U.S. Department of Treasury (Treasury) and the Internal Revenue Service (IRS) work to develop and issue future IRA guidance, Corning and HSC (“we”) must ensure that the IRA’s implementation will result in reducing U.S. reliance on overseas supply chains to meet our future clean energy needs. With an approach that appropriately considers the important role that current and future solar manufacturers will play in building out the U.S. solar energy sector, we believe that we can have a 100% U.S.-based solar manufacturing supply chain in the very near future that we are an integral part of.

II. Request for Comments

.03 Domestic Content Requirement

(2) Sections 45(b)(9)(B)(iii) and 45Y(g)(11)(B)(iii) provide that manufactured products that are components of a qualified facility upon completion of construction will be deemed to have been produced in the United States if not less than the adjusted percentage of the total costs of all of such manufactured products of such facility are attributable to manufactured products (including components) that are mined, produced, or manufactured in the United States.

(a) Does the term “component of a qualified facility” need further clarification? If so, what should be clarified and is any clarification needed for specific types of property, such as qualified interconnection property?

(b) Does the determination of “total costs” with regard to all manufactured products of a qualified facility that are attributable to manufactured products (including components) that are mined, produced, or manufactured in the United States need further clarification? If so, what should be clarified? Is guidance needed to clarify the term “mined, produced, or manufactured”?

(c) Does the term “manufactured product” with regard to the various technologies eligible for the domestic content bonus credit need further clarification? If so, what should be clarified? Is guidance needed to clarify what constitutes an “end product” (as defined in 49 C.F.R. 661.3) for purposes of satisfying the domestic content requirements?

(d) Does the adjusted percentage threshold rule that applies to manufactured products need further clarification? If so, what should be clarified?

(e) Does the treatment of subcomponents with regard to manufactured products need further clarification? If so, what should be clarified?

It is critical that Treasury and IRS guidance with respect to “manufactured product” and “end product” recognize that the solar manufacturing supply chain begins with the production of high-grade polysilicon in the U.S. This polysilicon, which is a semi-conductor, is then cut and manufactured into photovoltaic wafers. In turn, these wafers are further manufactured to produce solar cells. Solar cells are combined with protective coverings, backsheets, and electrical wiring to create a solar module. Finally, solar modules are arrayed to form a larger solar facility as an end product. However, the upstream components of polysilicon and photovoltaic wafers are integral to the manufacture of the solar cell and any downstream end products like solar modules and solar facilities, and in our view, must be included in fully incentivizing a domestic supply chain.

The adjusted percentage threshold rule that applies to manufactured products used in calculating domestic content bonus credit amount also needs clarification. We recommend that satisfying the adjusted percentage of solar cells domestically manufactured will not be sufficient for domestic content eligibility unless a sufficient portion of the cost of the manufacture is attributable to integral components of the solar cell, e.g. photovoltaic wafers and polysilicon, which are also domestically manufactured.

The IRA directs the Treasury and the IRS to use *all* relevant provisions of 49 § CFR 661, the Buy America requirements, to determine domestic origin. Pursuant to § 661.3, an end product “directly incorporates constituent components at the final assembly location” and is “ready to provide its intended end function or use without any further manufacturing or assembly change(s).” We understand there is a view that a solar facility should be considered the end

product given that a solar facility, when completed, is ready to provide its intended function without further manufacturing.

Pursuant to § 661.3, a component is such that “is directly incorporated into the end product at the final assembly location.”

Solar facilities incorporate several solar modules. Each module is a photovoltaic panel that is an assembly of connected solar cells. For a solar module to be of U.S. origin, all manufacturing processes of the solar module and the solar cell must occur in the U.S. Per § 661.11, a component is considered to be manufactured if subcomponents have been substantially transformed or merged into a new and functionally different article. Furthermore, § 661.3 defines manufacturing as a new product that is functionally different from that which would result from mere assembly of materials.

Accordingly, we understand there is a view that solar cells are considered components of a solar facility, since the essential function of a solar module – to convert sunlight into electricity – results from an assembly of solar cells. It is well-established that substantial transformation occurs when a solar cell is made from a silicon wafer which consists of polysilicon – and not when a solar module is made from solar cells.

With respect to solar, the Treasury and the IRS approach to issuing guidance for this provision should prioritize incentivizing a fully, domestically manufactured solar supply chain, starting with polysilicon. Polysilicon, whether viewed as a component or as integral to the component of a solar facility, should be the starting point in a domestic content analysis. Congressional intent of incentivizing solar project developers to select domestically produced and manufactured products is clear and must result in the implementation of domestic content definitions that support U.S. solar manufacturing across the supply chain.

We cannot afford to allow foreign-made solar components to undercut domestically manufactured solar products. If photovoltaic cells are substantially transformed overseas, a module should fail any domestic content test. For example, the cost of polysilicon and wafer produced in the U.S. should count toward the required percentage in the manufactured products rule. In the case of solar panels manufactured in the U.S. using polysilicon and wafers produced outside the U.S., the cost of such non-U.S. components reduces the cost of such solar panels attributable to domestic manufacturing.

At the very least, merely requiring assembly of a solar module to meet the domestic content test could severely undermine the ability of solar manufacturers to reshore the supply chain

and create thousands of good-paying jobs throughout the country and should be avoided at all costs. Module assembly adds little value and does not bring the functionality brought into the component by a solar cell. The process of manufacturing a cell from a wafer is complex and highly valuable as is the process of manufacturing polysilicon and of manufacturing wafer from polysilicon. We must create an incentive that will help secure this critical supply chain for our nation's clean energy future.

When creating a domestic content bonus, Congress never intended to subsidize a solar panel made with a majority of foreign components or foreign subcomponents. That would be counterintuitive and not aligned with the intention of the domestic content provisions, as well as § 45X. They created a domestic content bonus to incentivize the establishment of a fully domestic solar supply chain that would secure US energy independence for decades to come.


(4) Sections 48 and 48E have domestic content bonus amount rules similar to other provisions of the Code. Section 48(a)(12) has domestic content requirement rules similar to § 45(b)(9)(B) and § 48E(a)(3)(B) has domestic content rules similar to the rules of § 48(a)(12). What should the Treasury Department and the IRS consider in providing guidance regarding the similar domestic content requirements under § 48(a)(12) and § 48E(a)(3)(B)?


See comments in response to question 2.

Both Corning and HSC are part of the Solar Energy Manufacturers for America Coalition (SEMA). SEMA had provided comments for the coalition separately.

We appreciate your consideration of these comments and welcome the opportunity to discuss these issues further. If you have questions, please contact us at the following: Tymon Daniels, Vice President of Tax, at (607) 974-4995 or DanielsT@Corning.com, or Michelle O'Neill, Vice President of Global Government Affairs, at (202) 661-4174 or ONeillML@Corning.com.

Regards,

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