

**BCSE Comments on Proposed Regulations Related to the
Section 45X the Clean Manufacturing Production Tax Credit under the Inflation
Reduction Act**

February 13, 2024

Thank you for the opportunity for the Business Council for Sustainable Energy (BCSE) to provide its views in response to the request for comments in response to the proposed regulations for the Section 45X Advanced Manufacturing Production Credit (88 Fed. Reg. 86,844).

The Section 45X tax credit was established under the Inflation Reduction Act (IRA) and provides a credit for the U.S. production and sale of certain eligible components including solar and wind energy components, inverters, qualifying battery components and applicable critical minerals.

The Council appreciates the work of the staff at the Department of the Treasury (Treasury) and the Internal Revenue Service (IRS) to issue the proposed regulations that will support U.S. supply chains and catalyze significant clean energy investment and jobs in the United States.

BCSE advocates for energy and environmental policies that promote markets for clean, efficient, and sustainable energy products and services. Since its founding in 1992, BCSE has been focused on policy adoption that will increase the deployment of energy efficiency, natural gas, renewable energy, as well as energy storage, sustainable transportation, and emerging decarbonization technologies. As a diverse coalition, not all BCSE members take a position or endorse the issues discussed in this submission.

BCSE would like to acknowledge the submissions made in response to this request for comment provided by Schneider Electric and the Solar Energy Industries Association. BCSE encourages the thoughtful consideration of the issues and recommendations included in these submissions.

Add New Example Related to the Definition of “Produced by the Taxpayer”

BCSE recommends that the final regulations contain additional examples of the “produced by the taxpayer” definition. The proposal includes six examples of situations that would not qualify under the proposed definition. BCSE encourages the inclusion of one or more examples that show a qualifying scenario. Please see the example offered in the comments submitted by the Solar Energy Industries Association.

Revise the Definition of Inverters

The proposed regulations under Section 45X(c)(2)(A) generally defines an “inverter” as an end product that is suitable to convert direct current (DC) electricity from one or more solar modules or certified distributed wind energy systems into alternating current (AC) electricity. Section 45X(c)(2)(B) through (G) defines the following different types of eligible inverters: central inverter, commercial inverter, distributed wind inverter, microinverter, residential inverter, and utility inverter.



BCSE recommends that the definition be revised to clarify that the term "inverter" includes inverters that convert DC electricity stored in battery energy storage systems into AC electricity under certain circumstances. Because the text of Section 45X requires that inverters convert "from 1 or more solar modules," but does not prohibit the inclusion of battery inverters, the definition in the final rule should be modified to include inverters installed with battery energy storage systems that are part of the same qualified facility, energy property, or energy project as solar modules or distributed wind energy systems.

It also should permit the inclusion of battery inverters equipped with firmware "capable" of conversion of DC solar- and wind-derived electricity into AC electricity.

Amend the Qualification Requirement that DC Optimizers and Inverters be Sold Together as a Single End Product

The inclusion of DC power optimizers in a solar installation are contingent on the system specifications, customer requirements, and environmental conditions. For this reason, determining how many DC optimizers will be needed by the homeowner per inverter at the production stage is not known, limiting the ability of manufacturers to package optimizers and inverters together into a single product. Instead, this is a determination best made alongside a customer to account for variables including wattage rating of the photovoltaic panel and the number of optimizers that would be needed for the solar installation.

As such, BCSE recommends that inverter manufacturers also producing DC power optimizers be allowed to claim the Section 45X tax credit on the production of DC power optimizers suitable for connection to an inverter and produced to be sold as part of a system with manufactured inverters rather than as a combined end product.

In addition, to account for common commercial practice, Treasury should consider how best to prescribe a tax credit for DC power optimizers sold as part of a "DC optimized inverter system" when such products are sold separately from the inverter, but integrated into the inverter prior to, or at the point of, installation. BCSE members seek the opportunity to work with Treasury and other industry participants to refine the approach to Section 45X credits for DC optimized inverter systems.

BCSE appreciates the opportunity to share its views in response to the request for comments on the proposed regulations for the Section 45X Advanced Manufacturing Production Credit.

Please do not hesitate to contact BCSE President, [Lisa Jacobson](#) with any questions. Thank you for your consideration.