

Instructions for Form 7207

(January 2023)



Department of the Treasury
Internal Revenue Service

Advanced Manufacturing Production Credit

Section references are to the Internal Revenue Code unless otherwise noted.

Future Developments

For the latest information about developments related to Form 7207 and its instructions, such as legislation enacted after they were published, go to [IRS.gov/Form7207](https://www.irs.gov/Form7207).

What's New

The Inflation Reduction Act of 2022 created new section 45X, Advanced Manufacturing Production Credit. New Form 7207 is used to claim this credit for eligible components produced and sold after 2022.

General Instructions

Purpose of Form

Form 7207 is used to claim the advanced manufacturing production credit under section 45X for eligible components produced by the taxpayer and sold during the tax year in the taxpayer's trade or business to an unrelated person.

Additional Information

For more information, see section 45X and [Notice 2022-47](#).

Credit Amount

Generally, the credit for advanced manufacturing production is determined for each specific type of eligible component (see [Definitions](#), later).

Definitions

Eligible component. Eligible components are any solar energy components, wind energy components, inverters, qualifying battery components, and applicable critical minerals.



An eligible component does not include any property that is produced at a facility if the basis of any property which is part of such facility is taken into account for purposes of the qualifying advanced energy project credit of section 48C, as amended by Public Law 117-167.

Solar energy components are any of the following.

- **Photovoltaic cell** is the smallest semiconductor element of a solar module which performs the immediate conversion of light into electricity.
- **Photovoltaic wafer** is a thin slice, sheet, or layer of semiconductor material of at least 240 square centimeters produced by a single manufacturer either directly from molten or evaporated solar grade polysilicon or deposition of solar grade thin film semiconductor photon absorber layer, or through formation of an ingot from molten polysilicon and subsequent slicing, and which comprises the substrate or absorber layer of one or more photovoltaic cells.
- **Polymeric backsheet** is a sheet on the back of a solar module which acts as an electric insulator and protects the inner components of such module from the surrounding environment.
- **Solar grade polysilicon** is a silicon which is suitable for use in photovoltaic manufacturing, and purified to a minimum purity of 99.999999% silicon by mass.
- **Solar module** is the connection and lamination of photovoltaic cells into an environmentally protected final

assembly which is suitable to generate electricity when exposed to sunlight, and ready for installation without an additional manufacturing process.

- **Solar tracker** means a mechanical system that moves solar modules according to the position of the sun and to increase energy output.
- **Torque tube** means a structural steel support element (including longitudinal purlins) which is part of a solar tracker, is of any cross-sectional shape, may be assembled from individually manufactured segments, spans longitudinally between foundation posts, supports solar panels and is connected to a mounting attachment for solar panels (with or without separate module interface rails), and is rotated by means of a drive system.
- **Structural fastener** means a component which is used to connect the mechanical and drive system components of a solar tracker to the foundation of such solar tracker, to connect torque tubes to drive assemblies, or to connect segments of torque tubes to one another.

Wind energy components are any of the following.

- **Blade** means an airfoil-shaped blade which is responsible for converting wind energy to low-speed rotational energy.
- **Offshore wind foundation** is the component (including transition piece) which secures an offshore wind tower and any above-water turbine components to the seafloor using fixed platforms such as offshore wind monopiles, jackets, or gravity-based foundations, or floating platforms and associated mooring systems.
- **Nacelle** is the assembly of the drivetrain and other tower-top components of a wind turbine (with the exception of the blades and the hub) within their cover housing.
- **Related offshore wind vessel** is any vessel which is purpose-built or retrofitted for purposes of the development, transport, installation, operation, or maintenance of offshore wind energy components.
- **Tower** is a tubular or lattice structure which supports the nacelle and rotor of a wind turbine.

Inverters.

- **Inverter** means an end product which is suitable to convert direct current electricity from one or more solar modules or certified distributed wind energy systems into alternating current electricity.
- **Central inverter** means an inverter which is suitable for large utility-scale systems and has a capacity which is greater than 1,000 kilowatts (expressed on a per alternating current watt basis).
- **Commercial inverter** means an inverter which is suitable for commercial or utility-scale applications, has a rated output of 208, 480, 600, or 800 volt three-phase power, and has a capacity which is not less than 20 kilowatts and not greater than 125 kilowatts (expressed on a per alternating current watt basis).
- **Distributed wind inverter** means an inverter which is used in a residential or non-residential system which utilizes one or more certified distributed wind energy systems, and has a rated output of not greater than 150 kilowatts. A "certified distributed wind energy system" is certified by an accredited certification agency to meet standard 9.1-2009 of the American Wind Energy Association (including any subsequent revisions to or modifications of such standard which have been approved by the American National Standards Institute).

- **Microinverter** means an inverter which is suitable to connect with one solar module, has a rated output of 120 or 240 volt single-phase power, or 208 or 480 volt three-phase power, and has a capacity which is not greater than 650 watts (expressed on a per alternating current watt basis).
- **Residential inverter** means an inverter which is suitable for a residence, has a rated output of 120 or 240 volt single-phase power, and has a capacity which is not greater than 20 kilowatts (expressed on a per alternating current watt basis).
- **Utility inverter** means an inverter which is suitable for commercial or utility-scale systems, has a rated output of not less than 600 volt three-phase power, and has a capacity greater than 125 kilowatts and not greater than 1,000 kilowatts (expressed on a per alternating current watt basis).

Qualifying battery components are any of the following.

- **Electrode active material** means cathode materials, anode materials, anode foils, and electrochemically active materials including solvents, additives, and electrolyte salts that contribute to the electrochemical processes necessary for energy storage.
- **Battery cell** means an electrochemical cell comprised of one or more positive electrodes and one or more negative electrodes, with an energy density of not less than 100 watt-hours per liter, and capable of storing at least 12 watt-hours of energy.
- **Battery module** means a module (a) in the case of a module using battery cells, with two or more battery cells which are configured electrically, in series or parallel, to create voltage or current, as appropriate, to a specified end use; or (b) with no battery cells. To be eligible, either type of battery module must have an aggregate capacity of not less than 7 kilowatt-hours (or, in the case of a module for a hydrogen fuel cell vehicle, not less than 1 kilowatt-hour).

Applicable critical minerals are any of the following.

- **Aluminum** which is converted from bauxite to a minimum purity of 99% alumina by mass, or purified to a minimum purity of 99.9% aluminum by mass.
- **Antimony** which is converted to antimony trisulfide concentrate with a minimum purity of 90% antimony trisulfide by mass, or purified to a minimum purity of 99.65% antimony by mass.
- **Barite** which is barium sulfate purified to a minimum purity of 80% barite by mass.
- **Beryllium** which is converted to copper-beryllium master alloy, or purified to a minimum purity of 99% beryllium by mass.
- **Cerium** which is converted to cerium oxide which is purified to a minimum purity of 99.9% cerium oxide by mass, or purified to a minimum purity of 99% cerium by mass.
- **Cesium** which is converted to cesium formate or cesium carbonate, or purified to a minimum purity of 99% cesium by mass.
- **Chromium** which is converted to ferrochromium consisting of not less than 60% chromium by mass, or purified to a minimum purity of 99% chromium by mass.
- **Cobalt** which is converted to cobalt sulfate, or purified to a minimum purity of 99.6% cobalt by mass.
- **Dysprosium** which is converted to not less than 99% pure dysprosium iron alloy by mass, or purified to a minimum purity of 99% dysprosium by mass.
- **Europium** which is converted to europium oxide which is purified to a minimum purity of 99.9% europium oxide by mass, or purified to a minimum purity of 99% by mass.
- **Fluorspar** which is converted to fluorspar which is purified to a minimum purity of 97% calcium fluoride by mass, or purified to a minimum purity of 99% fluorspar by mass.
- **Gadolinium** which is converted to gadolinium oxide which is purified to a minimum purity of 99.9% gadolinium oxide by mass, or purified to a minimum purity of 99% gadolinium by mass.
- **Germanium** which is converted to germanium tetrachloride, or purified to a minimum purity of 99.99% germanium by mass.

- **Graphite** which is purified to a minimum purity of 99.9% graphitic carbon by mass.
- **Indium** (1) which is converted to (a) indium tin oxide, or (b) indium oxide which is purified to a minimum purity of 99.9% indium oxide by mass, or (2) which is purified to a minimum purity of 99% indium by mass.
- **Lithium** which is converted to lithium carbonate or lithium hydroxide, or purified to a minimum purity of 99.9% lithium by mass.
- **Manganese** which is converted to manganese sulphate, or purified to a minimum purity of 99.7% manganese by mass.
- **Neodymium** which is converted to neodymium-praseodymium oxide which is purified to a minimum purity of 99% neodymium-praseodymium oxide by mass, converted to neodymium oxide which is purified to a minimum purity of 99.5% neodymium oxide by mass, or purified to a minimum purity of 99.9% neodymium by mass.
- **Nickel** which is converted to nickel sulphate, or purified to a minimum purity of 99% nickel by mass.
- **Niobium** which is converted to ferroniobium, or purified to a minimum purity of 99% niobium by mass.
- **Tellurium** which is converted to cadmium telluride, or purified to a minimum purity of 99% tellurium by mass.
- **Tin** which is purified to low alpha emitting tin which has a purity of greater than 99.99% by mass, and possesses an alpha emission rate of not greater than 0.01 counts per hour per centimeter square.
- **Tungsten** which is converted to ammonium paratungstate or ferrotungsten.
- **Vanadium** which is converted to ferrovandium or vanadium pentoxide.
- **Yttrium** which is converted to yttrium oxide which is purified to a minimum purity of 99.999% yttrium oxide by mass, or purified to a minimum purity of 99.9% yttrium by mass.

Other Minerals

Any of the following minerals, provided that such mineral is purified to a minimum purity of 99% by mass:			
Arsenic	Lanthanum	Rubidium	Titanium
Bismuth	Lutetium	Ruthenium	Ytterbium
Erbium	Magnesium	Samarium	Zinc
Gallium	Palladium	Scandium	Zirconium
Hafnium	Platinum	Tantalum	
Holmium	Praseodymium	Terbium	
Iridium	Rhodium	Thulium	

Special Rules

For purpose of the advanced manufacturing production credit, section 45X(d)(1) provides that persons are treated as related to each other if such persons would be treated as a single employer under the regulations prescribed under the common control rules of section 52(b).

Sales of eligible components are considered under section 45X only with respect to eligible components, the production of which is within the United States or U.S. possessions, including continental shelf areas described in sections 638(1) and 638(2).

A person is treated as having sold an eligible component to an unrelated person if such component is integrated, incorporated, or assembled into another eligible component which is sold to an unrelated person.

Phase out. The credit for advanced manufacturing production will phase out for eligible components sold after 2029, except applicable critical minerals. For phase-out years, the credit amount is equal to the product of the amount determined in lines

1 through 7 of Form 7207 multiplied by the following phase-out percentages.

Tax year sold	Phase-out percentages
Sold during calendar year 2030	75%
Sold during calendar year 2031	50%
Sold during calendar year 2032	25%
Sold after December 31, 2032	0%

Specific Instructions

Figure the advanced manufacturing production credit from your trade or business on lines 1 through 7. Skip lines 1 through 7 if you are claiming only a credit that was allocated to you from an S corporation, partnership, estate, or trust.

Line 1, column (d). Enter on lines 1a through 1e, in column (d), the number of solar energy component units produced and sold.

Line 2, column (d). Enter on line 2a, in column (d), the sales price for any eligible offshore wind vessel produced and sold. Enter in column (d), on lines 2b through 2f, the number of wind energy component units produced and sold.

Line 3, column (d). Enter on lines 3a and 3b, in column (d), the number of torque tube and structural fastener component units produced and sold.

Line 4, column (d). Enter on lines 4a through 4e, in column (d), the number of inverter component units produced and sold.

Line 5, column (d). Enter on line 5a, in column (d), the costs incurred for electrode active materials produced and sold.

Line 6, column (d). Enter on lines 6a through 6c, in column (d), the number of battery component units produced and sold.

Line 7, column (d). Enter on line 7a, in column (d), the costs incurred for applicable critical minerals.

Line 8. Enter on line 8, in column (e), the amount of the advanced manufacturing production credit from other entities (partnerships, S corporations, estates, and trusts).

Line 9a. Enter on line 9a, in column (e), the sum of lines 1 through 8, column (e). Partnerships and S corporations, stop here and report this amount on Schedule K.

Estates and trusts, go to line 9b.

All others, stop here and report this amount on Form 3800, Part III, line 1b.

Line 9b. Allocate the credit on line 9a, column (e), between the estate or trust and the beneficiaries in the same proportion as income was allocated and enter the beneficiaries' share on line 9b, column (e). If the estate or trust is subject to the passive activity rules, complete Form 8582-CR, Passive Activity Credit Limitations, to determine the allowed credit that must be allocated between the estate or trust and the beneficiaries.

Paperwork Reduction Act Notice. We ask for the information on this form to carry out the Internal Revenue laws of the United States. You are required to give us the information. We need it to ensure that you are complying with these laws and to allow us to figure and collect the right amount of tax.

You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. Books or records relating to a form or its instructions must be retained as long as their contents may become material in the administration of any Internal Revenue law. Generally, tax returns and return information are confidential, as required by section 6103.

The time needed to complete and file this form will vary depending on individual circumstances. The estimated burden for individual and business taxpayers filing this form is approved under OMB control number 1545-0074 and 1545-0123 and is included in the estimates shown in the instructions for their individual and business income tax return. The estimated burden for all other taxpayers who file this form is shown below.

Recordkeeping	2 hr., 52 min.
Learning about the law or the form	0 hr., 50 min.
Preparing and sending the form to the IRS	0 hr., 34 min.

If you have comments concerning the accuracy of these time estimates or suggestions for making this form simpler, we would be happy to hear from you. See the instructions for the tax return with which this form is filed.