

Name(s) shown on return

Identifying number

Part I Information Regarding the Election To Treat the Lessee as the Purchaser of Investment Credit Property

If you are claiming the investment credit as a lessee based on a section 48(d) (as in effect on November 4, 1990) election, provide the following information. If you acquired more than one property as a lessee, attach a statement showing the information below.

- 1 Name of lessor: _____
- 2 Address of lessor: _____
- 3 Description of property: _____
- 4 Amount for which you were treated as having acquired the property \$ _____

Part II Qualifying Advanced Coal Project Credit, Qualifying Gasification Project Credit, Qualifying Advanced Energy Project Credit, and Advanced Manufacturing Investment Credit

5 Qualifying advanced coal project credit (see instructions):				
a Qualified investment in integrated gasification combined cycle property placed in service during the tax year for projects described in section 48A(d)(3)(B)(i) \$ _____ × 20% (0.20)	5a			
b Qualified investment in advanced coal-based generation technology property placed in service during the tax year for projects described in section 48A(d)(3)(B)(ii) \$ _____ × 15% (0.15)	5b			
c Qualified investment in advanced coal-based generation technology property placed in service during the tax year for projects described in section 48A(d)(3)(B)(iii) \$ _____ × 30% (0.30)	5c			
d Total. Add lines 5a, 5b, and 5c				5d
6 Qualifying gasification or advanced energy project credit (see instructions):				
a Qualified investment in property placed in service during the tax year (a) of advanced energy project property or (b) of qualified gasification property for which credits were allocated or reallocated after October 3, 2008, and that includes equipment that separates and sequesters at least 75% of the project's carbon dioxide emissions \$ _____ × 30% (0.30)	6a			
b Qualified investment in property other than in 6a above placed in service during the tax year \$ _____ × 20% (0.20)	6b			
c Total. Add lines 6a and 6b				6c
7 Advanced manufacturing investment credit (see instructions): Basis in qualified property as part of an advanced manufacturing facility, placed in service during the tax year and after 2022, the construction of which began after August 9, 2022 \$ _____ × 25% (0.25)				7
8 Reserved for future use				8
9 Enter the applicable unused investment credit from cooperatives (see instructions)				9
10 Add lines 5d, 6c, 7, and 9. Report this amount on Form 3800, Part III, line 1a (see instructions if you entered an amount on line 7)				10

Part III Rehabilitation Credit and Energy Credit

11 Rehabilitation credit (see instructions for requirements that must be met):			
a	Check this box if you are electing under section 47(d)(5) to take your qualified rehabilitation expenditures into account for the tax year in which paid (or, for self-rehabilitated property, when capitalized). See instructions. Note: This election applies to the current tax year and to all later tax years. You may not revoke this election without IRS consent <input type="checkbox"/>		
b	Enter the dates on which the 24- or 60-month measuring period begins _____ and ends _____ .		
c	Enter the adjusted basis of the building as of the beginning date above (or the first day of your holding period, if later) \$ _____		
d	Enter the amount of the qualified rehabilitation expenditures incurred, or treated as incurred, during the period on line 11b above \$ _____ Enter the amount of qualified rehabilitation expenditures and multiply by the percentage shown:		
e	Pre-1936 buildings under the transition rule (see instructions) . . . \$ _____ × 10% (0.10)	11e	
f	Certified historic structures under the transition rule (see instructions) \$ _____ × 20% (0.20)	11f	
g	Certified historic structures with expenditures paid or incurred after 2017 and not under the transition rule (see instructions) . . \$ _____ × 4% (0.04)	11g	
Note: This credit is allowed for a 5-year period beginning in the tax year that the qualified rehabilitated building is placed in service. For properties identified on line 11f or 11g, complete lines 11h and 11i.			
h	Enter the assigned NPS project number or the pass-through entity's employer identification number (see instructions) _____		
i	Enter the date that the NPS approved the Request for Certification of Completed Work (see instructions) _____		
12 Energy credit:			
a	Basis of property using geothermal energy placed in service during the tax year. See instructions \$ _____ × 30% (0.30)	12a	
b	Basis of property using solar illumination or solar energy placed in service during the tax year that is attributable to periods after 2005, the construction of which began before 2020 or after 2021 (see instructions) \$ _____ × 30% (0.30)	12b	
c	Basis of property using solar illumination or solar energy placed in service during the tax year, the construction of which began in 2020 or 2021 (see instructions) \$ _____ × 30% (0.30)	12c	
d	Reserved for future use _____	12d	
Qualified fuel cell property (see instructions):			
e	Basis of property placed in service during the tax year that was acquired after 2005 and before October 4, 2008, and the basis attributable to construction, reconstruction, or erection by the taxpayer after 2005 and before October 4, 2008 \$ _____ × 30% (0.30)	12e	
f	Applicable kilowatt capacity of property on line 12e (see instructions) _____ × \$1,000	12f	
g	Enter the smaller of line 12e or line 12f _____	12g	
h	Basis of property placed in service during the tax year that is attributable to periods after October 3, 2008, the construction of which began before 2020 or after 2021 . . \$ _____ × 30% (0.30)	12h	
i	Applicable kilowatt capacity of property on line 12h (see instructions) _____ × \$3,000	12i	
j	Enter the smaller of line 12h or line 12i _____	12j	
k	Basis of property placed in service during the tax year, the construction of which began in 2020 or 2021 \$ _____ × 30% (0.30)	12k	
l	Applicable kilowatt capacity of property on line 12k (see instructions) _____ × \$3,000	12l	
m	Enter the smaller of line 12k or line 12l _____	12m	
n	Reserved for future use _____	12n	
o	Reserved for future use _____	12o	
p	Reserved for future use _____	12p	

Part III Rehabilitation Credit and Energy Credit (continued)

Qualified microturbine property (see instructions):			
q	Basis of property placed in service during the tax year that was acquired after 2005, the basis attributable to construction, reconstruction, or erection by the taxpayer after 2005 \$ _____ × 10% (0.10)	12q	
r	Kilowatt capacity of property on line 12q × \$200	12r	
s	Enter the smaller of line 12q or line 12r		12s
Combined heat and power system property (see instructions):			
Caution: You can't claim this credit if the electrical capacity of the property is more than 50 megawatts or has a mechanical energy capacity of more than 67,000 horsepower or an equivalent combination of electrical and mechanical energy capabilities.			
t	Basis of property placed in service during the tax year. See instructions. For property placed in service after 2022, multiply by 30% instead of 10% \$ _____ × 10% (0.10)	12t	
u	If the electrical capacity of the property is measured in: • Megawatts, divide 15 by the megawatt capacity. Enter 1.0 if the capacity is 15 megawatts or less. • Horsepower, divide 20,000 by the horsepower. Enter 1.0 if the capacity is 20,000 horsepower or less	12u	
v	Multiply line 12t by line 12u		12v
Qualified small wind energy property (see instructions):			
w	Basis of property placed in service during the tax year that was acquired after October 3, 2008, and before 2009 and the basis attributable to the construction, reconstruction, or erection by the taxpayer after October 3, 2008, and before 2009 \$ _____ × 30% (0.30)	12w	
x	Enter the smaller of line 12w or \$4,000		12x
y	Basis of property placed in service during the tax year that is attributable to periods after 2008, the construction of which began before 2020 or after 2021 \$ _____ × 30% (0.30)		12y
z	Basis of property placed in service during the tax year, the construction of which began in 2020 or 2021 \$ _____ × 30% (0.30)		12z
aa	Reserved for future use		12aa
Waste energy recovery property:			
bb	Basis of property placed in service during the tax year. See instructions \$ _____ × 30% (0.30)		12bb
Geothermal heat pump systems (see instructions):			
cc	Basis of property placed in service during the tax year. See instructions. For property placed in service after 2022, multiply by 30% instead of 10% \$ _____ × 10% (0.10)		12cc
Qualified investment credit facility property (see instructions):			
dd	Basis of property placed in service during the tax year \$ _____ × 30% (0.30)		12dd
ee	Reserved for future use		12ee
ff	Reserved for future use		12ff
gg	Reserved for future use		12gg
hh	Other energy credits and special adjustments (see instructions)		12hh
13	Enter the applicable unused investment credit from cooperatives (see instructions)		13
14	Combine lines 11e, 11f, 11g, 12a, 12b, 12c, 12g, 12j, 12m, 12s, 12v, 12x, 12y, 12z, 12bb, 12cc, 12dd, 12hh, and 13. Report this amount on Form 3800, Part III, line 4a		14



Instructions for Form 3468

Investment Credit

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

Future Developments

For the latest information about developments related to Form 3468 and its instructions, such as legislation enacted after they were published, go to [IRS.gov/Form3468](https://www.irs.gov/Form3468).

What's New

New advanced manufacturing investment credit. The Creating Helpful Incentives To Produce Semiconductors (CHIPS) Act of 2022, P.L. 117-167, Div. A, sec. 107, added a new investment credit equal to 25% of the qualified investment in any advanced manufacturing facility for the primary purpose of manufacturing of semiconductors or semiconductor manufacturing equipment. This credit applies to property placed in service after 2022, and, for any property the construction of which begins prior to 2023, only to the extent of the basis thereof attributable to the construction, reconstruction, or erection after August 9, 2022. See [Advanced Manufacturing Investment Credit](#), later.

If properly elected, an eligible taxpayer, can treat the amount of the credit attributable to any advanced manufacturing facility for the tax year as a payment against the tax. A partnership or S corporation can elect to receive a payment rather than a credit. See [Deemed Payment](#), later.

Inflation Reduction Act of 2022 (IRA 2022). IRA 2022 included several new or enhanced energy investment credits effective for periods after 2022. Fiscal year filers may claim these credits for periods in 2023. IRA 2022 enacted the following.

- Established new credits for energy storage technology, qualified biogas property, and microgrid controllers.
- Established bonus credits for domestic content bonus credit, energy communities, and certain solar and wind facilities in connection with low-income communities.
- Established an election to treat clean hydrogen production facilities as energy properties.
- Established new rules regarding prevailing wage requirements and apprenticeship requirements.
- Enhanced rules regarding qualifying advanced energy project. Additional guidance related to qualifying advanced energy project will be posted at [IRS.gov/Form3468](https://www.irs.gov/Form3468) in the coming weeks.
- Established new rules for certain filers to elect to treat credit amounts as deemed payments and rules related to the transfer of certain credits for tax years beginning in 2023, including short tax years beginning and ending in 2023. Additional guidance related to electing the deemed payment will be posted at [IRS.gov/Form3468](https://www.irs.gov/Form3468) in the coming weeks.

See [Energy Credit](#) and lines 12a–12hh, later, for more information.

General Instructions

Purpose of Form

Use Form 3468 to claim the investment credit. The investment credit consists of the following credits.

- Rehabilitation.
- Energy.
- Qualifying advanced coal project.
- Qualifying gasification project.
- Qualifying advanced energy project.
- Advanced manufacturing investment.

If you file electronically, you must send in a paper Form 8453, U.S. Individual Income Tax Transmittal for an IRS *e-file* Return, if attachments are required for Form 3468.

Investment Credit Property

Investment credit property is any depreciable or amortizable property that qualifies for the rehabilitation credit, energy credit, qualifying advanced coal project credit, qualifying gasification project credit, qualifying advanced energy project credit, or advanced manufacturing investment credit.

You can't claim a credit for property that is:

- Used mainly outside the United States (except for property described in section 168(g)(4));
- Used by a governmental unit or foreign person or entity (except for a qualified rehabilitated building leased to that unit, person, or entity; and property used under a lease with a term of less than 6 months);
- Used for lodging or in the furnishing of lodging (see section 50(b)(2) for exceptions); or
- Certain MACRS business property to the extent it has been expensed under section 179.

Qualified Progress Expenditures

Qualified progress expenditures are those expenditures made before the property is placed in service and for which the taxpayer has made an election to treat the expenditures as progress expenditures. Qualified progress expenditure property is any property that is being constructed by or for the taxpayer and which (a) has a normal construction period of 2 years or more, and (b) it is reasonable to believe that the property will be new investment credit property in the hands of the taxpayer when it is placed in service. The placed-in-service requirement doesn't apply to qualified progress expenditures.

Qualified progress expenditures for:

- Self-constructed property means the amount that is properly chargeable (during the tax year) to a capital account with respect to that property; or
- Non-self-constructed property means the lesser of: (a) the amount paid (during the tax year) to another person for the construction of the property, or (b) the amount that represents the proportion of the overall cost to the taxpayer of the construction by the other person, which is properly attributable to that portion of the construction that is completed during the tax year.

For more information on qualified progress expenditures, see section 46(d) (as in effect on November 4, 1990). For details on

qualified progress expenditures for the rehabilitation credit, see section 47(d).

For details on qualified progress expenditures for the advanced manufacturing investment credit, see section 48D(b) (5).

At-Risk Limit for Individuals and Closely Held Corporations

The cost or basis of property for investment credit purposes may be limited if you borrowed against the property and are protected against loss, or if you borrowed money from a person who is related or who has an interest (other than as a creditor) in the business activity. The cost or basis must be reduced by the amount of the nonqualified nonrecourse financing related to the property as of the close of the tax year in which the property is placed in service. If, at the close of a tax year following the year property was placed in service, the nonqualified nonrecourse financing for any property has increased or decreased, then the credit base for the property changes accordingly. The changes may result in an increased credit or a recapture of the credit in the year of the change. See sections 49 and 465 for details.

Recapture of Credit

You may have to refigure the investment credit and recapture all or a portion of it if:

- You dispose of investment credit property before the end of 5 full years after the property was placed in service (recapture period);
- You change the use of the property before the end of the recapture period so that it no longer qualifies as investment credit property;
- The business use of the property decreases before the end of the recapture period so that it no longer qualifies (in whole or in part) as investment credit property;
- Any building to which section 47(d) applies will no longer be a qualified rehabilitated building when placed in service;
- Any property to which section 48(b), 48A(b)(3), 48B(b)(3), 48C(b)(2), 48D(b)(5), or 48E(e) applies will no longer qualify as investment credit property when placed in service;
- Before the end of the recapture period, your proportionate interest is reduced by more than 1/3 in an S corporation, partnership, estate, or trust that allocated the cost or basis of property to you for which you claimed a credit;
- You return leased property (on which you claimed a credit) to the lessor before the end of the recapture period;
- A net increase in the amount of nonqualified nonrecourse financing occurs for any property to which section 49(a)(1) applied;
- A grant under section 1603 of the American Recovery and Reinvestment Tax Act of 2009 (Section 1603 grant) was made for section 48 property for which a credit was allowed for progress expenditures before the grant was made. Recapture is applicable to those amounts previously included in the qualified basis for an energy credit, including progress expenditures, that are also the basis for the Section 1603 grant;
- A grant under section 9023 of the Patient Protection and Affordable Care Act was made for investment for which a credit was determined under section 48D (as in effect before its repeal on March 23, 2018) before the grant was made; or
- You engage in an applicable transaction, as defined in section 50(a)(6)(D).

Exceptions to recapture. Recapture of the investment credit doesn't apply to any of the following.

1. A transfer due to the death of the taxpayer.
2. A transfer between spouses or incident to divorce under section 1041. However, a later disposition by the transferee

is subject to recapture to the same extent as if the transferor had disposed of the property at the later date.

3. A transaction to which section 381(a) applies (relating to certain acquisitions of the assets of one corporation by another corporation).
4. A mere change in the form of conducting a trade or business if:
 - a. The property is retained as investment credit property in that trade or business, and
 - b. The taxpayer retains a substantial interest in that trade or business.

A mere change in the form of conducting a trade or business includes a corporation that elects to be an S corporation and a corporation whose S election is revoked or terminated.

For more information, see the Instructions for Form 4255, Recapture of Investment Credit.



See section 46(g)(4) (as in effect on November 4, 1990), and related regulations, if you made a withdrawal from a capital construction fund set up under the Merchant Marine Act of 1936 to pay the principal of any debt incurred in connection with a vessel on which you claimed investment credit.

Any required recapture is reported on Form 4255. For details, see Form 4255.

Specific Instructions



Generally, (a) an estate or trust whose entire qualified rehabilitation expenditures or bases in energy property are allocated to beneficiaries, (b) an S corporation, or (c) a partnership doesn't have to complete and attach Form 3468 to its tax return. However, if the estate or trust, S corporation, or partnership is the owner of or passing through qualified rehabilitation expenditures for a certified historic structure, the entity must complete lines 11h and 11i of the form and attach it to its tax return even if the credit is not being claimed by the entity. See Shareholders of S Corporations, Partners of Partnerships, and Beneficiaries of Estates and Trusts below for information that the entity must provide when allocating the credit.

Shareholders of S Corporations, Partners of Partnerships, and Beneficiaries of Estates and Trusts

If you are a shareholder, partner, or beneficiary of the designated pass-through entity, the entity will provide to you the information necessary to complete the following.

- The qualified investment in qualifying advanced coal project property for lines 5a through 5c.
- The qualified investment in qualifying gasification or advanced energy project property for lines 6a and 6b.
- The information for line 7 less any amount for advanced manufacturing investment credit that is treated as deemed payment (if elected on line 10).
- The information for lines 11b through 11g for the rehabilitation credit.
- The basis of energy property for lines 12a, 12b, 12c, 12e, 12h, 12k, 12q, 12t, 12w, 12y, 12z, 12bb, 12cc, and 12dd.
- The kilowatt capacity for lines 12f, 12i, 12l, and 12r.
- The megawatt capacity or horsepower for line 12u.
- Lines 1 through 4 and lines 11h and 11i, if the lessor has elected to treat the lessee as having acquired the property.

Part I—Information Regarding the Election To Treat the Lessee as the Purchaser of Investment Credit Property

Generally, for purposes of eligibility for and figuring the amount of the investment credit, a lessor of property may elect to treat the lessee as having acquired the property. Once the election is made, the lessee will be entitled to an investment credit for that property for the tax year in which the property is placed in service and the lessor will not be entitled to such a credit.

If the leased property is disposed of, or otherwise ceases to be investment credit property, the property will generally be subject to the recapture rules for early dispositions.

The lessor will provide the lessee with all the information needed to complete lines 11h and 11i, if applicable.

For information on making the election, see section 48(d) (as in effect on November 4, 1990) and related regulations. For limitations, see sections 46(e)(3) and 48(d) (as in effect on November 4, 1990).

Line 2

Enter the lessor's full address. Enter the address of the lessor's principal office or place of business. Include the suite, room, or other unit number after the street address. If the post office doesn't deliver mail to the street address and the lessor has a P.O. box, show the box number instead.

Do not use the address of the registered agent for the state in which the lessor is incorporated. For example, if a business is incorporated in Delaware or Nevada and the lessor's principal place of business is located in Little Rock, AR, you should enter the Little Rock address.

If the lessor receives its mail in care of a third party (such as an accountant or attorney), enter on the street address line "C/O" followed by the third party's name and street address or P.O. box.

Part II—Qualifying Advanced Coal Project Credit, Qualifying Gasification Project Credit, Qualifying Advanced Energy Project Credit, and Advanced Manufacturing Investment Credit

Qualifying Advanced Coal Project Credit

A qualifying advanced coal project is a project that:

- Uses advanced coal-based generation technology (as defined in section 48A(f)) to power a new electric generation unit or to refit or repower an existing electric generation unit (including an existing natural gas-fired combined cycle unit);
- Has fuel input that, when completed, will be at least 75% coal;
- Has an electric generation unit or units at the site that will generate at least 400 megawatts;
- Has a majority of the output that is reasonably expected to be acquired or utilized;
- Is to be constructed and operated on a long-term basis when the taxpayer provides evidence of ownership or control of a site of sufficient size;
- Will be located in the United States; and
- Includes equipment that separates and sequesters at least 65% (70% in the case of an application for reallocated credits) of the project's total carbon dioxide emissions for project applications described in section 48A(d)(2)(A)(ii).

For more information on the new allocation round for section 48A credits, see Notice 2020-88, 2020-53 I.R.B. 1795, available at [IRS.gov/irb/2020-53_IRB#NOT-2020-88](https://www.irs.gov/irb/2020-53_IRB#NOT-2020-88).

Basis. Qualified investment for any tax year is the basis of eligible property placed in service by the taxpayer during the tax year that is part of a qualifying advanced coal project. Eligible property is limited to property that can be depreciated or amortized and that was constructed, reconstructed, or erected and completed by the taxpayer; or that is acquired by the taxpayer if the original use of such property commences with the taxpayer.

Basis reduction for certain financing. If property is financed in whole or in part by subsidized energy financing or by tax-exempt private activity bonds, the amount that you can claim as basis is the basis that would otherwise be allowed multiplied by a fraction that is 1 reduced by a second fraction, the numerator of which is that portion of the basis allocable to such financing or proceeds, and the denominator of which is the basis of the property.

For example, if the basis of the property is \$100,000 and the portion allocable to such financing or proceeds is \$20,000, the fraction of the basis that you may claim the credit on is $\frac{4}{5}$ (that is, 1 minus $\frac{\$20,000}{\$100,000}$).

Subsidized energy financing means financing provided under a federal, state, or local program, a principal purpose of which is to provide subsidized financing for projects designed to conserve or produce energy.

Line 5a

Enter the qualified investment in integrated gasification combined cycle property placed in service during the tax year for projects described in section 48A(d)(3)(B)(i). Eligible property is any property that is part of a qualifying advanced coal project using an integrated gasification combined cycle and is necessary for the gasification of coal, including any coal handling and gas separation equipment.

Integrated gasification combined cycle is an electric generation unit that produces electricity by converting coal to synthesis gas, which in turn is used to fuel a combined cycle plant to produce electricity from both a combustion turbine (including a combustion turbine/fuel cell hybrid) and a steam turbine.

Line 5b

Enter the qualified investment in advanced coal-based generation technology property placed in service during the tax year for projects described in section 48A(d)(3)(B)(ii). Eligible property is any property that is part of a qualifying advanced coal project (defined earlier) not using an integrated gasification combined cycle.

Line 5c

Enter the qualified investment in advanced coal-based generation technology property placed in service during the tax year for projects described in section 48A(d)(3)(B)(iii). Eligible property is any certified property located in the United States and that is part of a qualifying advanced coal project (defined earlier) that has equipment that separates and sequesters at least 65% of the project's total carbon dioxide emissions. This percentage increases to 70% if the credits are later reallocated by the IRS.

The credit will be recaptured if a project fails to attain or maintain the carbon dioxide separation and sequestration requirements. For details, see section 48A(i) and Notice 2011-24, 2011-14 I.R.B. 603, available at [IRS.gov/irb/2011-14_IRB#NOT-2011-24](https://www.irs.gov/irb/2011-14_IRB#NOT-2011-24).

Qualifying Gasification or Advanced Energy Project Credits

Qualifying gasification project. A qualifying gasification project is a project that:

- Employs gasification technology (as defined in section 48B(c)(2)),
- Is carried out by an eligible entity (as defined in section 48B(c)(7)), and
- Includes a qualified investment of which an amount not to exceed \$650 million is certified under the qualifying gasification program as eligible for credit.

The total amount of credits that may be allocated under the qualifying gasification project program may not exceed \$600 million.

For more information on the qualifying gasification project and the qualifying gasification program, see Notice 2009-23, 2009-16 I.R.B. 802, available at [IRS.gov/irb/2009-16_IRB#NOT-2009-23](https://www.irs.gov/irb/2009-16_IRB#NOT-2009-23), which is amplified by Notice 2014-81, 2014-53 I.R.B. 1001, available at [IRS.gov/irb/2014-53_IRB#NOT-2014-81](https://www.irs.gov/irb/2014-53_IRB#NOT-2014-81). Also, see Notice 2011-24, 2011-14 I.R.B. 603, available at [IRS.gov/irb/2011-14_IRB#NOT-2011-24](https://www.irs.gov/irb/2011-14_IRB#NOT-2011-24).

Basis reduction. If property is financed in whole or in part by subsidized energy financing or by tax-exempt private activity bonds, figure the credit by using the basis of such property reduced under the rules described in [Basis reduction for certain financing](#), earlier.

Qualifying advanced energy project. To be eligible for the qualifying advanced energy project credit, some or all of the qualified investment in the qualifying advanced energy project must be certified by the IRS under section 48C(d).

For more information on certification, see Notice 2009-72, 2009-37 I.R.B. 325, available at [IRS.gov/irb/2009-37_IRB#NOT-2009-72](https://www.irs.gov/irb/2009-37_IRB#NOT-2009-72) and Notice 2013-12, 2013-10 I.R.B. 543, available at [IRS.gov/irb/2013-10_IRB#NOT-2013-12](https://www.irs.gov/irb/2013-10_IRB#NOT-2013-12).

Qualifying advanced energy project means a project that re-equips, expands, or establishes a manufacturing facility for the production of:

- Property designed to be used to produce energy from the sun, wind, geothermal deposits (within the meaning of section 613(e)(2)), or other renewable resources;
- Fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles;
- Electric grids to support the transmission of intermittent sources of renewable energy, including storage of the energy;
- Property designed to capture and sequester carbon dioxide emissions;
- Property designed to refine or blend renewable fuels or to produce energy conservation technologies (including energy-conserving lighting technologies and smart grid technologies);
- New qualified plug-in electric drive motor vehicles (as defined in section 30D), or components that are designed specifically for use with those vehicles, including electric motors, generators, and power control units; and
- Other advanced energy property designed to reduce greenhouse gas emissions.



The credit for 2-wheeled plug-in electric vehicles expired on December 31, 2021. Unless new legislation is passed, it's no longer eligible for a qualified plug-in electric drive motor vehicle credit.

A qualifying advanced energy project doesn't include any portion of a project for the production of any property that is used in the refining or blending of any transportation fuel (other than renewable fuels).

Eligible property. Eligible property is property that is necessary for the production of property described in section 48C(c)(1)(A)(i), for which depreciation or amortization is available and is tangible personal property or other tangible property (not including a building or its structural components), but only if the property is used as an integral part of the qualifying advanced energy project.

Transitional rule. Enter only the basis:

- Attributable to construction, reconstruction, or erection by the taxpayer after February 17, 2009;
- Of property acquired and placed in service after February 17, 2009; and
- Only to the extent of the qualified investment (as determined under section 46(c) and (d) as in effect on November 4, 1990) with respect to qualified progress expenditures made after February 17, 2009.



For fiscal year filers claiming the qualifying advanced energy project after 2022, additional guidance relating to qualifying advanced energy project will be posted at [IRS.gov/Form3468](https://www.irs.gov/Form3468) in the coming weeks.

Line 6a

If you're claiming the qualified gasification project property (defined in [Qualifying gasification project](#), earlier), enter the qualified investment in qualifying gasification project property placed in service during the tax year for which credits were allocated or reallocated after October 3, 2008, and that includes equipment that separates and sequesters at least 75% of the project's carbon dioxide emissions. Qualified investment is the basis of eligible property placed in service during the tax year that is part of a qualifying gasification project.

For purposes of this credit, eligible property includes any property that is part of a qualifying gasification project and necessary for the gasification technology of such project. The IRS is required to recapture the benefit of any allocated credit if a project fails to attain or maintain these carbon dioxide separation and sequestration requirements. See section 48B(f) and [IRS.gov/irb/2011-14_IRB#NOT-2011-24](https://www.irs.gov/irb/2011-14_IRB#NOT-2011-24).

If you're claiming the qualifying advanced energy property (defined in [Qualifying advanced energy project](#), earlier), enter the qualified investment in qualifying advanced energy project property placed in service during the tax year. Qualified investment is the basis of eligible property placed in service during the tax year that is part of a qualifying advanced energy project.

If you're claiming both the qualifying gasification project property and the qualifying advanced energy project property, add the qualified investment property for both and enter that amount on the dashed entry line before 6a.

Line 6b

Enter the qualified investment, other than line 6a, in qualifying gasification project property (defined earlier) placed in service during the tax year.

Advanced Manufacturing Investment Credit

The advanced manufacturing investment credit is equal to 25% of the qualified investment in any advanced manufacturing facility for an eligible taxpayer for the tax year.

Qualified investment. The qualified investment for any advanced manufacturing facility is the basis of any qualified property placed in service by the taxpayer during the tax year and after 2022 that is part of an advanced manufacturing facility.

Advanced manufacturing facility. Advanced manufacturing facility means a facility whose primary purpose is the manufacturing of semiconductors or semiconductor manufacturing equipment.

Eligible taxpayer. An eligible taxpayer is a taxpayer who isn't a foreign entity of concern (as defined in section 9901(6) of P. L. 116-283), and hasn't made an applicable transaction (as defined in section 50(a)) during the tax year.

Qualified property. Qualified property includes any building or its structural components and all of the following.

- Property that is tangible property.
- Property that is allowed depreciation or amortization.
- Property that is constructed, reconstructed, or erected by the taxpayer or acquired by the taxpayer if the original use of the property commences with the taxpayer.
- Property that is integral to the operation of the advanced manufacturing facility.

Exception. Qualified property doesn't include a building or a portion of a building used for offices, administrative services, or other functions unrelated to manufacturing.

Coordination with rehabilitation credit. The qualified investment with respect to any advanced manufacturing facility for any tax year shall not include the portion of the basis of any property that is attributable to qualified rehabilitation expenditures (as defined in section 47(c)(2)).

Certain progress expenditure rules made applicable. Rules similar to the rules of section 46(c)(4) and 46(d) (as in effect on the day before the date of the enactment of P.L. 101-158) shall apply for purposes of the advanced manufacturing investment credit.

Line 7

Enter the qualifying investment in advanced manufacturing facility (defined above) placed in service after 2022, and for any property the construction began prior to 2023, to the extent the basis attributable to the construction, reconstruction, or erection began after August 9, 2022.

Credit From Cooperatives

Line 9

Patrons, including cooperatives that are patrons in other cooperatives, enter the unused investment credit from the qualifying advanced coal project credit, qualifying gasification project credit, qualifying advanced energy project credit, or advanced manufacturing investment credit allocated from cooperatives. If you are a cooperative, see the instructions for Form 3800, Part III, line 1a, for allocating the investment credit to your patrons.

Deemed Payment

A taxpayer can make an election with respect to an [Advanced Manufacturing Investment Credit](#) to treat the credit as a deemed payment. The deemed payment will be applied against the tax imposed for the tax year for which the credit was determined,

equal to the amount of the credit. See the special rule for partnerships and S corporations, later.

Requesting the deemed payment. A deemed payment election will be made no later than the due date of the tax return (including extensions of time to file) for the tax year for which the election is made. The election can't be made earlier than May 8, 2023. The deemed payment election is irrevocable.

Payment application date. The deemed payment will be treated as made on the later of either the due date of the tax return (determined without regard to extensions) or the date the return is filed.

Additional information. If you choose to elect to treat the advanced manufacturing investment credit as a payment under section 48D(d)(1) or 48D(d)(2)(A), guidance regarding the election, including a detailed list of all required information, will be provided at a later date. Please consult this guidance when completing Form 3468 and making the deemed payment election.

For the latest guidance related to electing the deemed payment, go to [IRS.gov/Form3468](https://www.irs.gov/Form3468).

Attachment. Attach a statement to your return with information regarding the deemed payment election. The attached information statement should be named "CHIPS22DPE." For example, if you attach a PDF, the name of the PDF should be "CHIPS22DPE."

Excessive payment. With respect to the property for the tax year for which the deemed payment is made, an excess payment is the following.

- The amount treated as a payment by section 48D(d)(1) or the amount of payment made by section 48D(d)(2)(A), over
- The amount of the credit that would be allowed per section 48D(a).

Addition to tax. If any amount treated as a payment is determined to be an excessive payment, the tax imposed for the tax year that the determination is made will be increased by the following.

- The amount of the excessive payment, plus
- 20% of the excessive payment.

The 20% addition to tax will not apply if the taxpayer demonstrates that the excessive payment resulted from reasonable cause.

Basis reduction and recapture. Rules similar to the rules of sections 50(a) and 50(c) will apply with respect to the amount treated as a payment made by the taxpayer under section 48D(d)(1), and any payment made under section 48D(d)(2)(A). See [Recapture of Credit](#), earlier, for more information.

You must reduce the basis by the amount of the credit determined.

Application to partnerships and S corporations. If a partnership or S corporation makes an election under section 48D(d)(1):

- The Secretary will make a payment to the partnership or S corporation equal to the amount of the credit. For more information, see [Treatment of payments to partnerships and S corporations](#) below.
- The credit will be reduced to zero for all purposes of the Internal Revenue Code. No double benefit will be allowed.
- Any payment will be treated as tax exempt income for purposes of sections 705 and 1366.
- A partner's distributive share of the tax exempt income will be based on the partner's distributive share of the otherwise applicable credit for the tax year.

Application at partner and shareholder level. In the case of any property held directly by a partnership or S corporation, no election by any partner or shareholder will be allowed with

respect to any credit determined under section 48D(a) with respect to such property.

Treatment of payments to partnerships and S corporations. Deemed payments will be treated in the same manner as a refund due from a credit provision.

Line 10

Add lines 5d, 6c, 7, and 9. Enter this amount on line 10 and on Form 3800, Part III, line 1a. However, if you elected to treat the amount of credit on line 7 as a deemed payment per section 48D(d)(1), enter the total less the amount treated as a deemed payment on Form 3800, Part III, line 1a. As a result, Form 3468, line 10, and Form 3800, Part III, line 1a, may not match depending on your election.

Use the table below to see what line on your tax return you enter the deemed payment amount per section 48D(d)(1). On the dotted line next to the line on the tax return write "CHIPS22DPE." If there is not a dotted line after the entry space to make this entry, put an asterisk next to the line number and put a footnote at the bottom of the page indicating the line number and write "CHIPS22DPE."

Form	Line Number
1065	Line 28
1120	Schedule J, line 20d
1120-F	Line 5j
1120-REIT	Line 25f(1)
1120-RIC	Line 29f
1120-S	Line 23d

Part III—Rehabilitation Credit and Energy Credit

Rehabilitation Credit

You are allowed a credit for qualified rehabilitation expenditures made for any qualified rehabilitated building. You must reduce your basis by the amount of the credit determined for the tax year. See Regulations section 1.47-7.

If the adjusted basis of the building is determined in whole or in part by reference to the adjusted basis of a person other than the taxpayer, see Regulations section 1.48-12(b)(2)(viii) for additional information that must be attached.

Qualified rehabilitated building. To be a qualified rehabilitated building, your building must meet all five of the following requirements.

1. The building must be a certified historic structure. A certified historic structure is any building (a) listed in the National Register of Historic Places, or (b) located in a registered historic district (as defined in section 47(c)(3)(B)) and certified by the Secretary of the Interior as being of historic significance to the district. Certification requests are made through your State Historic Preservation Officer on National Park Service (NPS) Form 10-168, Historic Preservation Certification Application. The request for certification should be made prior to physical work beginning on the building. For pre-1936 buildings under the transition rule, see [Transitional rule for amounts paid or incurred after 2017](#), later.
2. The building must be substantially rehabilitated. A building is considered substantially rehabilitated if your qualified

rehabilitation expenditures during a self-selected 24-month period that ends with or within your tax year are more than the greater of \$5,000 or your adjusted basis in the building and its structural components. Figure adjusted basis on the first day of the 24-month period or the first day of your holding period, whichever is later. If you are rehabilitating the building in phases under a written architectural plan and specifications that were completed before the rehabilitation began, substitute "60-month period" for "24-month period."

3. Depreciation must be allowable with respect to the building. Depreciation isn't allowable if the building is permanently retired from service. If the building is damaged, it isn't considered permanently retired from service where the taxpayer repairs and restores the building and returns it to actual service within a reasonable period of time.
4. The building must have been placed in service before the beginning of rehabilitation. This requirement is met if the building was placed in service by any person at any time before the rehabilitation began.
5. For a building under the transition rule, (a) at least 75% of the external walls must be retained with 50% or more kept in place as external walls, and (b) at least 75% of the existing internal structural framework of the building must be retained in place.

Qualified rehabilitation expenditures. To be qualified rehabilitation expenditures, your expenditures must meet all six of the following requirements.

1. The expenditures must be for (a) nonresidential real property, (b) residential rental property (but only if a certified historic structure; see Regulations section 1.48-1(h)), or (c) real property that has a class life of more than 12.5 years.
2. The expenditures must be incurred in connection with the rehabilitation of a qualified rehabilitated building.
3. The expenditures must be capitalized and depreciated using the straight line method.
4. The expenditures can't include the costs of acquiring or enlarging any building.
5. If the expenditures are in connection with the rehabilitation of a certified historic structure or a building in a registered historic district, the rehabilitation must be certified by the Secretary of the Interior as being consistent with the historic character of the property or district in which the property is located. This requirement doesn't apply to a building in a registered historic district if (a) the building isn't a certified historic structure; (b) the Secretary of the Interior certifies that the building isn't of historic significance to the district; and (c) if the certification in (b) occurs after the rehabilitation began, the taxpayer certifies in good faith that the taxpayer wasn't aware of that certification requirement at the time the rehabilitation began.
6. The expenditures can't include any costs allocable to the part of the property that is (or may reasonably be expected to be) tax-exempt use property (as defined in section 168(h) except that "50%" shall be substituted for "35%" in paragraph (1)(B)(iii)). This exclusion doesn't apply for line 11d.

Line 11

For credit purposes, the expenditures are generally taken into account for the tax year in which the qualified rehabilitated building is placed in service. However, with certain exceptions, you may elect to take the expenditures into account for the tax year in which they were paid (or, for a self-rehabilitated building,

when capitalized) if (a) the normal rehabilitation period for the building is at least 2 years, and (b) it is reasonable to expect that the building will be a qualified rehabilitated building when placed in service. For details, see section 47(d). To make this election, check the box on line 11a. The credit, as a percent of expenditures paid or incurred during the tax year for any qualified rehabilitated building, depends on the type of structure and its location.

Transitional rule for amounts paid or incurred after 2017.

The 10% credit for pre-1936 buildings no longer applies and the 20% credit for a certified historic structure is generally modified to allow 100% of qualified rehabilitation expenditures ratably over a 5-year period for amounts paid or incurred after 2017. For qualified rehabilitation expenditures paid or incurred during the transitional period stated below, the taxpayer can claim the 10% credit for pre-1936 buildings and the 20% credit for a certified historic structure (under section 47(a), as in effect before December 22, 2017). The transitional rule applies to amounts paid or incurred as follows.

In the case of qualified rehabilitation expenditures with respect to any building (a) owned or leased by the taxpayer during the entirety of the period after 2017; and (b) with respect to the 24-month period selected by the taxpayer under section 47(c)(1)(B)(i) (as in effect after December 21, 2017) (or the 60-month period applicable under section 47(c)(1)(B)(ii)), which begins no later than 180 days after December 22, 2017, the transitional rule applies to expenditures paid or incurred after the end of the tax year in which the 24-month period (or the 60-month period) ends.

If you have more than one property that qualifies for the rehabilitation credit, attach a schedule showing the type of property (pre-1936 building or certified historic structure), NPS number, date of final certification, and the partnership employer identification number (EIN), if applicable. Also, indicate if the transitional rule applies.

Line 11h

If you are claiming a credit for a certified historic structure on line 11f or 11g, enter the assigned NPS project number on line 11h. If the qualified rehabilitation expenditures are from an S corporation, partnership, estate, or trust, enter on line 11h the EIN of the pass-through entity instead of the assigned NPS project number, and skip line 11i.

The lessor will provide the lessee with the NPS project number to enter on line 11h.

Line 11i

Enter the date of the final certification of completed work received from the Secretary of the Interior on line 11i. If the final certification hasn't been received by the time the tax return is filed for a year in which the credit is claimed, attach a copy of the first page of NPS Form 10-168, Historic Preservation Certification Application (Part 2—Description of Rehabilitation), with an indication that it was received by the Department of the Interior or the State Historic Preservation Officer, together with proof that the building is a certified historic structure (or that such status has been requested). After the final certification of completed work has been received, file Form 3468 with the first income tax return filed after receipt of the certification and enter the assigned NPS project number and the date of the final certification of completed work on the appropriate lines on the form. Also, attach an explanation and indicate the amount of credit claimed in prior years.

If you fail to receive final certification of completed work prior to the date that is 30 months after the date that you filed the tax return on which the credit was claimed, you must submit a written statement to the IRS stating that fact before the last day of the 30th month. You will be asked to consent to an agreement under section 6501(c)(4) extending the period of assessment for any tax relating to the time for which the credit was claimed.

Mail to:

Internal Revenue Service
Technical Services
31 Hopkins Plaza, Room 1108
Baltimore, MD 21201

You must retain a copy of the final certification of completed work as long as its contents may be needed for the administration of any provision of the Internal Revenue Code.

If the final certification is denied by the Department of the Interior, the credit is disallowed for any tax year in which it was claimed, and you must file an amended return if necessary. See Regulations section 1.48-12(d)(7)(ii) for details.

Energy Credit

The energy credit for the tax year is the energy percentage of the basis of each energy property placed in service during the tax year. The energy properties include the following.

- Geothermal energy property.
- Solar energy property to generate electricity, or solar energy property to illuminate.
- Qualified fuel cell property.
- Qualified microturbine property.
- Combined heat and power system property.
- Qualified small wind energy property.
- Waste energy recovery property.
- Geothermal heat pump system property.
- Energy storage technology property.
- Qualified biogas property.
- Microgrid controllers property.



IRA 2022 added to the energy properties under section 48 the items energy storage technology, qualified biogas property, and microgrid controllers. Fiscal year filers may be eligible to claim these credits for qualified energy property placed in service after 2022.

To qualify as energy property, property must:

1. Meet the performance and quality standards, if any, that have been prescribed by regulations and are in effect at the time the property is acquired;
2. Be property for which depreciation (or amortization in lieu of depreciation) is allowable; and
3. Be property either:
 - a. The construction, reconstruction, or erection of which is completed by the taxpayer; or
 - b. Acquired by the taxpayer if the original use of such property commences with the taxpayer.

Property will not include any property that is part of a production credit under section 45 for the tax year or any prior tax year.

Energy property doesn't include any property acquired before February 14, 2008, or to the extent of basis attributable to construction, reconstruction, or erection before February 14, 2008, that is public utility property, as defined by section 46(f)(5) (as in effect on November 4, 1990), and related regulations.

You must reduce the basis of energy property by 50% of the energy credit determined.

You must reduce the basis of energy property used for figuring the credit by any amount attributable to qualified rehabilitation expenditures.

Basis reduction. If energy property (acquired before 2009, or to the extent of its basis attributable to construction, reconstruction, or erection before 2009) is financed in whole or in part by subsidized energy financing or by tax-exempt private activity bonds, reduce the basis of such property under the rules described in [Basis reduction for certain financing](#), earlier. For property acquired after 2008, and for basis attributable to construction, reconstruction, or erection after 2008, there is no basis reduction for property financed by subsidized energy financing or by tax-exempt private activity bonds.

Credit reduced for tax-exempt bonds. The amount of the credit with respect to any facility for any tax year will be reduced by the amount that is the product of the amount so determined for such year and the lesser of one of the following.

- 15%, or
- A fraction, which the numerator is the sum for the tax year and all prior tax years, of proceeds of an issue of any obligations the interest on which is exempt from tax under section 103 and that is used to provide financing for the qualified facility over the denominator, which is the aggregate amount of additions to the capital account for the qualified facility for the tax year and all prior tax years as of the close of the tax year.



The credit reduced for tax-exempt bonds, above, applies to construction, reconstruction, or erection of an energy property, the construction of which begins after August 16, 2022.

Coordination with Department of Treasury grants. In the case of any property where the Secretary makes a grant under section 1603 of the American Recovery and Reinvestment Tax Act of 2009, no credit will be determined under section 48 or section 45 with respect to the property for the tax year in which the grant is made or any subsequent tax year.

Recapture. If a credit was determined with respect to a property for any tax year ending before the grant is made:

- The tax imposed on the taxpayer for the tax year in which the grant is made will be increased by the credit amount allowed under section 38,
- The general business carryforwards under section 39 will be adjusted to recapture the portion of the credit that was not allowed, and
- The amount of the grant will be determined without regard to any reduction in the basis of the property by the credit.

Treatment of grants. Any grant will not be included in the gross income or alternative minimum taxable income of the taxpayer, but will be taken into account in determining the basis of the property to which the grant relates, except that the basis of such property will be reduced under section 50(c) in the same manner as a credit allowed.

Interconnection property. In general, energy property shall include amounts paid or incurred by the taxpayer for qualified interconnection property in connection with the installation of energy property placed in service after 2022 (as defined in section 48(a)(3)) that:

- Has a maximum net output of not greater than 5 megawatts (as measured in alternating current), to provide for the transmission or distribution of the electricity produced or stored by such property; and
- Are properly chargeable to the capital account of the taxpayer.

Qualified interconnection property. Qualified interconnection property is, with respect to an energy project that isn't a microgrid controller, any tangible property that:

- Is part of an addition, modification, or upgrade to a transmission or distribution system that is required at or beyond the point at which the energy project interconnects to such transmission or distribution system in order to accommodate such interconnection;
- Is either constructed, reconstructed, or erected by the taxpayer, or that the cost with respect to the construction, reconstruction, or erection of such property is paid or incurred by the taxpayer; and
- The original use, pursuant to an interconnection agreement, commences with a utility.

Interconnection agreement. Interconnection agreement means an agreement with a utility for the purposes of interconnecting the energy property owned by the taxpayer to the transmission or distribution system of the utility.

Utility. For the purposes of section 48(a)(8)(D), utility means the owner or operator of an electrical transmission or distribution system that is subject to the regulatory authority of any the following.

- A state or political subdivision thereof.
- Any agency or instrumentality of the United States.
- A public service or public utility commission or other similar body of any state or political subdivision thereof.
- The governing or ratemaking body of an electric cooperative.

Special rule for interconnection property. In the case of expenses paid or incurred for interconnection property, amounts otherwise chargeable to capital account with respect to such expenses will be reduced under rules similar to the rules of section 50(c)(3).

Increased credit amount for energy projects. In the case of any energy project that satisfies the requirements of [Project requirements](#) below, the amount of the credit determined will be equal to an amount multiplied by 5. For purposes of the previous statement, the form has already been adjusted to show 30% or 10%, as applicable for tax year 2022. See [Notice 2022-61](#) for more information.

Energy project. Energy project means a project consisting of one or more energy properties that are part of a single project.

Project requirements. A project meets the project requirements if it is one of the following.

- A project with a maximum net output of less than 1 megawatt of electrical (as measured in alternating current) or thermal energy.
- A project the construction of which begins before January 29, 2023, with respect to prevailing wage and apprenticeship requirements.
- A project that satisfies the prevailing wage and apprenticeship requirements.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, the credit amounts are 6% or 2% respectively, unless the prevailing wage and apprenticeship requirements are satisfied or the project has a maximum net output of less than 1 megawatt of electrical or thermal energy.

Prevailing wage requirements. In general, the taxpayer shall ensure, with respect to any energy project, that any laborers and mechanics employed by the taxpayer or any contractor or subcontractor shall be paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which the project is located as most recently determined by the Secretary of Labor, in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Questions regarding the applicability of a wage determination or its listed classifications and wage rates should be directed to the Department of Labor, Wage, and Hour Division via email at IRAprevailingwage@dol.gov.

Laborers, mechanics, contractors, or subcontractors. Any laborers and mechanics employed by the taxpayer or any contractor or subcontractor in the construction of such energy project, and for the 5-year period beginning on the date such project is originally placed in service, the alteration or repair of such project, shall be paid prevailing wages.

Subject to recapture, for purposes of any determination in the construction of such energy credit for the tax year in which the energy project is placed in service, the taxpayer shall be deemed to satisfy the requirement for the alteration or repair of such project, at the time such project is placed in service.

Correction and penalty for failure to satisfy wage requirements. In the case of any taxpayer that fails to satisfy the prevailing wage requirements mentioned above, the taxpayer shall be deemed to have satisfied the requirement with respect to any laborer or mechanic who was paid at a rate below the prevailing wage rate, if the following are completed.

1. The taxpayer makes payment to such laborer or mechanic in an amount equal to the sum of the following.
 - a. An amount equal to the difference between (i) the amount of wages paid to such laborer or mechanic during such period, and (ii) the amount of wages required to be paid to such laborer or mechanic during such period, plus
 - b. Interest on the amount determined under item (i) at the underpayment rate established under section 6621(a)(2) (determined by substituting "6%" for "3%") for the period described in item (i), and
2. Makes payment to the Secretary of a penalty in an amount equal to the product of the following.
 - a. \$5,000, multiplied by
 - b. The total number of laborers and mechanics who were paid wages at a rate below the prevailing wage requirement rate for any period during such year.

Deficiency procedures don't apply. Subchapter B of chapter 63 (relating to deficiency procedures for income, estate, gift, and certain excise taxes) will not apply with respect to the assessment or collection of any penalty imposed.

Intentional disregard. If the Secretary determines that any failure described in [Correction and penalty for failure to satisfy wage requirements](#), earlier, was due to intentional disregard of the prevailing wage requirements, then the following changes will occur.

- In number 1 above, "the sum" with "three times the sum," and
- In number 2a above, "\$5,000" with "\$10,000."

Limitation on period for payment. Pursuant to rules issued by the Secretary, in the case of a final determination by the Secretary with respect to any failure by the taxpayer to satisfy the prevailing wage requirements, the [Correction and penalty for failure to satisfy wage requirements](#), described above, will not apply unless the payments are made by the taxpayer on or before 180 days after the date of such determination.

Recapture. The Secretary shall provide guidance for recapturing the benefit of any increase in the credit allowed with respect to any project that doesn't satisfy the prevailing wage requirements (after [Correction and penalty for failure to satisfy wage requirements](#) is applied) for the 5-year period beginning on the date the project was originally placed in service, the alteration or repair (but which doesn't cease to be investment credit property within the meaning of section 50(a)). The period

and percentage of such recapture shall be determined under rules similar to the rules of section 50(a).

Apprenticeship requirements. Regarding the construction of any qualified facility, apprenticeship requirements are as follows.

- Taxpayers shall ensure that the applicable percentage of the total labor hours of the construction, alteration, or repair work (including such work performed by any contractor or subcontractor), subject to apprentice to journeyworker ratio, be performed by qualified apprentices. For construction that begins before 2023, the ratio is 10%; and for construction that begins in 2023, the ratio is 12.5%.
- Apprenticeship requirements for apprentice-to-journeyworker ratios shall be subject to any applicable requirements for apprentice-to-journeyworker ratios of the Department of Labor or the applicable state apprenticeship agency.
- With regard to participation, each taxpayer, contractor, or subcontractor who employs four or more individuals to perform construction, alteration, or repair work shall employ one or more qualified apprentices to perform such work.

Registered apprenticeship programs can be located using the Office of Apprenticeship's partner finder tool, available at <https://www.apprenticeship.gov/partner-finder> and through the applicable State Apprenticeship Agency, <https://www.apprenticeship.gov/about-us/state-offices>.

Exception. A taxpayer will not be treated as failing to satisfy the requirements described above, if the taxpayer:

1. Satisfies a good faith effort; or
2. In the case of any failure by the taxpayer to satisfy the percentage of total labor hours and participation above, with respect to the construction, alteration, or repair work on any qualified facility where construction began in 2023, makes payment to the Secretary of a penalty in an amount equal to the product of:
 - a. \$50, multiplied by
 - b. The total labor hours for which the requirement described in such subparagraph was not satisfied with respect to the construction, alteration, or repair work on such qualified facility.

Good faith effort. For purposes of the exception above, a taxpayer will be deemed to have satisfied the requirements under this paragraph with respect to a qualified facility if the taxpayer has requested qualified apprentices from a registered apprenticeship program, as defined in section 3131(e)(3)(B), and either of the following apply.

- The request has been denied, provided that such denial is not the result of a refusal by the taxpayer or any contractors or subcontractors engaged in the performance of construction, alteration, or repair work with respect to such qualified facility to comply with the established standards and requirements of the registered apprenticeship program; or
- The registered apprenticeship program fails to respond to such request within 5 business days after the date on which such registered apprenticeship program received such request.

Intentional disregard. If the Secretary determines that any failure described in good faith effort is due to intentional disregard to satisfy the requirements for the percentage of total labor hours and participation, earlier, Exception 2 shall be applied by substituting "\$500" for "\$50" in 2a, earlier.

Labor hours. Labor hours means the total number of hours devoted to the performance of construction, alteration, or repair work by any individual employed by the taxpayer or by any contractor or subcontractor; however, it excludes any hours worked by foremen, superintendents, owners, or persons

employed in a bona fide executive, administrative, or professional capacity (within the meaning of those terms in part 541 of title 29, Code of Federal Regulations).

Qualified apprentice. A qualified apprentice is an individual who is employed by the taxpayer or by any contractor or subcontractor and who is participating in a registered apprenticeship program, as defined in section 3131(e)(3)(B).

Line 12a

Geothermal energy. Geothermal energy property is equipment that uses geothermal energy to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613(e)(2)). For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electrical transmission stage.

Enter the basis of any property placed in service during the tax year that uses geothermal energy.

Line 12b

Solar energy. Solar energy property is property that has the following.

1. Equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight.
2. Electrochromic glass that uses electricity to change its light transmittance properties in order to heat or cool a structure, if placed in service after 2022.
3. Equipment that uses solar energy to:
 - a. Generate electricity,
 - b. Heat or cool (or provide hot water for use in) a structure, or
 - c. Provide solar process heat (but not to heat a swimming pool).

Enter the basis, attributable to periods after 2005 and the construction of which began before 2020 or after 2021, if the property was acquired by the taxpayer or the basis is attributable to construction, reconstruction, or erection by the taxpayer. See [When construction begins](#), later.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12c

Enter the basis of property using solar illumination, electrochromic glass, or solar energy placed in service during the tax year and the construction of which began in 2020 or 2021.

For the definition of solar illumination, electrochromic glass, or solar energy property, see the instructions to [Line 12b](#), earlier.

Line 12e

Qualified fuel cell property. Qualified fuel cell property is a fuel cell power plant that has a nameplate capacity of at least 0.5 kilowatts (1 kilowatt in the case of fuel cell plant with a linear generator assembly) of electricity using an electrochemical or electromechanical process and has electricity-only generation efficiency greater than 30%. See section 48(c)(1) for further details.

Fuel cell power plant. Fuel cell power plant means an integrated system comprised of a fuel cell stack assembly or linear generator assembly, and associated balance of plant components that converts a fuel into electricity using electrochemical or electromechanical means.

Linear generator assembly. Linear generator assembly doesn't include any assembly that contains rotating parts.



Qualified fuel cell property that uses electromechanical process or a fuel cell power plant that is comprised of a linear generator assembly are for property placed in service after 2022.

Enter the basis, attributable to periods after 2005 and before October 4, 2008, of any qualified fuel cell property placed in service during the tax year, if the property was acquired after 2005 and before October 4, 2008, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after 2005 and before October 4, 2008.

Line 12f

Enter the applicable number of kilowatts of capacity attributable to the basis on line 12e. This entry must be a whole number.

Line 12h

Enter the basis, attributable to periods after October 3, 2008, and the construction of which began before 2020 or after 2021, of any qualified fuel cell property placed in service during the tax year.

For a definition of qualified fuel cell property, see [Line 12e](#), earlier. Also, see [When construction begins](#), later.

Basis is attributable to periods after October 3, 2008, if the property was acquired after October 3, 2008, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after October 3, 2008.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12i

Enter the applicable number of kilowatts of capacity attributable to the basis on line 12h. This entry must be a whole number.

Line 12k

Enter the basis of property using qualified fuel cell energy placed in service during the tax year and the construction of which began in 2020 or 2021. See [When construction begins](#), later.

Line 12l

Enter the applicable number of kilowatts of capacity attributable to the basis on line 12k. This entry must be a whole number.

Line 12q

Qualified microturbine property. Qualified microturbine property is a stationary microturbine power plant that has a nameplate capacity of less than 2,000 kilowatts and has an electricity-only generation efficiency of not less than 26% at

International Standard Organization conditions. See section 48(c)(2) for further details.

Stationary microturbine power plant. Stationary microturbine power plant means an integrated system comprised of a gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components that converts a fuel into electricity and thermal energy. It also includes all secondary components located between the existing infrastructure for fuel delivery and the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency, and power factors.

Enter the basis, attributable to periods after 2005, of any qualified microturbine property placed in service during the tax year, if the property was acquired after 2005, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after 2005.

Line 12t

Combined heat and power system property. Combined heat and power system property means property comprising a system that:

1. Uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both; in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications).
2. Determines an energy efficiency percentage on a Btu basis.
3. Has energy efficiency percentage of which exceeds 60% and it produces:
 - a. At least 20% of its total useful energy in the form of thermal energy that isn't used to produce electrical or mechanical power (or a combination thereof), and
 - b. At least 20% of its total useful energy in the form of electrical or mechanical power (or a combination thereof).

For details, see section 48(c)(3).

Note. Taxpayers cannot take a credit for both combined heat and power system property and waste energy recovery property for the same property. Taxpayers must elect not to treat such property as combined heat and power system property for section 48 purposes.

Limitation. In the case of combined heat and power system property with an electrical capacity in excess of the applicable capacity placed in service during the tax year, the credit for that year shall be equal to the amount that bears the same ratio to the credit, as the applicable capacity bears to the capacity of such property.

Applicable capacity. Applicable capacity means the following:

- 15 megawatts;
- A mechanical energy capacity of more than 20,000 horsepower; or
- An equivalent combination of electrical and mechanical energy capacities.

Maximum capacity. Combined heat and power system property shall not include any property comprising a system if:

- The system has a capacity in excess of 50 megawatts,
- A mechanical energy capacity in excess of 67,000 horsepower, or
- An equivalent combination of electrical and mechanical energy capacities.

Energy efficiency percentage. The energy efficiency percentage of a combined heat and power system property is the fraction—where the numerator is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates, and expected to be consumed in its normal application, and the denominator is the lower heating value of the fuel sources for the system. The energy efficiency percentage is determined on a Btu basis.

Combined heat and power system property doesn't include property used to transport the energy source to the facility or to distribute energy produced by the facility.

Biomass systems. Systems designed to use biomass for at least 90% of the energy source are eligible for a credit that is reduced in proportion to the degree to which the system fails to meet the efficiency standard. For more information, see section 48(c)(3)(D).

Enter the basis, attributable to periods after October 3, 2008, of any qualified combined heat and power system property placed in service during the tax year, if the property was acquired after October 3, 2008, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after October 3, 2008. For property placed in service after 2022, multiply the basis by 30% (0.30) instead of 10% (0.10).



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12w

Qualified small wind energy property. Qualified small wind energy property means property that uses a qualifying small wind turbine to generate electricity. For this purpose, a qualifying small wind turbine means a wind turbine that has a nameplate capacity of not more than 100 kilowatts. For details, see section 48(c)(4). In addition, for small wind energy property acquired or placed in service (in the case of property constructed, reconstructed, or erected) after February 2, 2015, see Notice 2015-4, 2015-5 I.R.B. 407, available at [IRS.gov/irb/2015-05_IRB#NOT-2015-4](#), as modified by Notice 2015-51, 2015-31 I.R.B. 133, available at [IRS.gov/irb/2015-31_IRB#NOT-2015-51](#), for performance and quality standards that small wind energy property must meet to qualify for the energy credit.

Enter the basis, attributable to periods after October 3, 2008, and before 2009, of any qualified small wind energy property placed in service during the tax year, if the property was acquired after October 3, 2008, and before 2009, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after October 3, 2008, and before 2009.

Line 12x

Enter the smaller of the basis you entered on line 12w or \$4,000.

Line 12y

For the definition of qualified small wind energy property, see the instructions for [Line 12w](#), earlier.

Enter the basis, attributable to periods after 2008 and the construction of which began before 2020 or after 2021, of any qualified small wind energy property placed in service during the tax year, if the property was acquired by the taxpayer or the

basis is attributable to construction, reconstruction, or erection by the taxpayer. See [When construction begins](#), later.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12z

For the definition of qualified small wind energy property, see the instructions for [Line 12w](#), earlier.

Enter the basis of property using qualified small wind energy property placed in service during the tax year and the construction of which began in 2020 or 2021. See [When construction begins](#), later.

Line 12bb

Waste energy recovery property. Qualified waste energy recovery property means property that generates electricity solely from heat from buildings or equipment if the primary purpose of such building or equipment is not the generation of electricity. The term “waste energy recovery property” shall not include any property that has a capacity in excess of 50 megawatts. For details, see section 48(c)(5).

Note. Taxpayers cannot take a credit for both combined heat and power system property and waste energy recovery property for the same property. Taxpayers must elect not to treat such property as combined heat and power system property for section 48 purposes.

Note. The transitional rules of section 48(m) (as in effect on November 4, 1990) apply to waste energy recovery property for periods after 2020.

Enter the basis of waste energy recovery property placed in service during the tax year and multiply the basis of property that uses waste energy recovery property by 30%.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12cc

Geothermal heat pump systems. Geothermal heat pump systems constitute equipment that uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure. For details, see section 48(a)(3)(A)(vii).

Enter the basis, attributable to periods after October 3, 2008, of any geothermal heat pump system placed in service during the tax year, if the property was acquired after October 3, 2008, or to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after October 3, 2008. If any property was placed in service during 2022, multiply the basis of the property that uses geothermal heat pump systems by 10%. If any property was placed in service after 2022, multiply the basis of property that uses geothermal heat pump systems by 30%.



For fiscal year filers, the project of which construction begins on January 29, 2023, or later, see [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

Line 12dd

Qualified investment credit facility property. Qualified investment credit facility property is property that:

- Is tangible personal property or other tangible property (not including a building or its structural components), but only if the property is used as an integral part of the qualified investment credit facility;
- Is constructed, reconstructed, erected, or acquired by the taxpayer;
- Depreciation or amortization is allowable; and
- The original use begins with the taxpayer.

See section 48(a)(5) for details.

Note. The transitional rules of section 48(m) (as in effect on November 4, 1990) apply to offshore wind facilities for periods after 2016. Under the transitional rules of section 48(m) (as in effect on November 4, 1990), the phaseout of the section 48 credit provided for other types of qualified investment credit facilities at section 48(a)(5)(E), does not apply to qualified offshore wind facilities.

Qualified investment credit facility. A qualified investment credit facility is a facility that:

1. Is one of the following qualified facilities that is placed in service after 2008. See [When construction begins](#) below.
 - a. Wind facility under section 45(d)(1).
 - b. Closed-loop biomass facility under section 45(d)(2).
 - c. Open-loop biomass facility under section 45(d)(3).
 - d. Geothermal or solar energy facility under section 45(d)(4).
 - e. Landfill gas facility under section 45(d)(6).
 - f. Trash facility under section 45(d)(7).
 - g. Qualified hydropower facility under section 45(d)(9).
 - h. Marine and hydrokinetic renewable energy facility under section 45(d)(11);
 - i. Is a qualified offshore wind facility. See Notice 2021-5, 2021-03 I.R.B. 479, available at [IRS.gov/irb/2021-03_IRB#NOT-2021-5](#), for more information on beginning of construction requirements applied to offshore and federal land projects.
2. No credit has been allowed under section 45 for that facility (see [Note](#) below); and
3. An irrevocable election was made to treat the facility as energy property.

Note. If a taxpayer retrofits an energy property that previously received a credit under section 45 by satisfying the 80/20 Rule provided in section 7.05 of Notice 2018-59, 2018-28 I.R.B. 196, available at [IRS.gov/irb/2018-28_IRB#NOT-2018-59](#), the taxpayer may claim an investment tax credit based on its investment. However, if the energy property is within the recapture period for the section 45 credit, the taxpayer may have to recapture all or part of such section 45 credit accordingly.

Qualified offshore wind facility. For purposes of section 48(a)(5), qualified offshore wind facility means a qualified facility (within the meaning of section 45(d)(1)) that is located in the inland navigable waters of the United States or in the coastal waters of the United States.

When construction begins. Two methods can be used to establish that construction of a qualified facility has begun.

1. **Physical Work Test** is satisfied when physical work of a significant nature begins and other requirements provided

in section 4 of [IRS.gov/irb/2018-28 IRB#NOT-2018-59](#) are met.

2. **Five Percent Safe Harbor** is satisfied when a taxpayer pays or incurs (within the meaning of Regulations section 1.461-1(a)(1) and (2)) five percent or more of the total cost of the energy property and meets other requirements provided in section 5 of [IRS.gov/irb/2018-28 IRB#NOT-2018-59](#).

Although both methods can be used, only one method is needed to establish that construction of a qualified facility has begun. For energy property the construction of which begins after 2018, as determined under the Physical Work Test or the Five Percent Safe Harbor, construction will be deemed to have begun on the date the taxpayer first satisfies one of the two methods. The requirements to begin construction may be modified in certain limited circumstances involving significant national security concerns. See Notice 2019-43, 2019-31 I.R.B. 487, available at [IRS.gov/irb/2019-31 IRB#NOT-2019-43](#), for details. Also, see Notice 2020-41, 2020-25 I.R.B. 954, available at [IRS.gov/irb/2020-25 IRB#NOT-2020-41](#), on tax relief for delays caused by COVID-19. Additionally, see Notice 2021-05, 2021-3 I.R.B. 479 for more information on the beginning of construction requirements applied to offshore and federal lands projects.

Additional information. The election to treat a qualified facility as energy property is made by claiming the energy credit with respect to qualified investment credit facility property by completing Form 3468 and attaching it to your timely filed income tax return (including extensions) for the tax year that the property is placed in service. You must make a separate election for each qualified facility that is to be treated as a qualified investment credit facility. You must also attach a statement to Form 3468 that includes the following information.

1. Your name, address, taxpayer identification number, and telephone number.
2. For each qualified investment credit facility, include the following.
 - a. A detailed technical description of the facility, including generating capacity.
 - b. A detailed technical description of the energy property placed in service during the tax year as an integral part of the facility, including a statement that the property is an integral part of such facility.
 - c. The date that the energy property was placed in service.
 - d. An accounting of your basis in the energy property.
 - e. A depreciation schedule reflecting your remaining basis in the energy property after the energy credit is claimed.
3. A statement that you haven't and won't claim a Section 1603 grant for new investment in the property for which you are claiming the energy credit.
4. A declaration, applicable to the statement and any accompanying documents, signed by you, or signed by a person currently authorized to bind you in such matters that state the following: "Under penalties of perjury, I declare that I have examined this statement, including accompanying documents, and to the best of my knowledge and belief, the facts presented in support of this statement are true, correct, and complete."

Enter the basis of any qualified investment credit facility property, placed in service during the tax year, the construction of which began after 2016.

Line 12hh—Other Energy Credits and Special Adjustments

Energy storage technology. Energy storage technology is:

- Property (other than property primarily used in the transportation of goods or individuals and not for the production of electricity) that receives, stores, and delivers energy for conversion to electricity (or, in the case of hydrogen that stores energy), and has a nameplate capacity of not less than 5 kilowatt hours; and
- Thermal energy storage property.

Modifications of certain property. In the case of any energy storage technology property, otherwise described above, that was either (1) placed in service before August 16, 2022, and that has a capacity of less than 5 kilowatt hours and is modified to where the property (after the modification) has a nameplate capacity of at least 5 kilowatt hours; or (2) is modified in a manner that increases the nameplate capacity to at least 5 kilowatt hours, then the modified property will be treated as energy storage technology, except for the treatment of the basis of the existing property prior to the modification.

Thermal energy storage property. Thermal energy storage property is property comprising a system that:

- Is directly connected to a heating, ventilation, or air conditioning system;
- Removes heat from, or adds heat to, a storage medium for subsequent use; and
- Provides energy for the heating or cooling of the interior of a residential or commercial building.

Thermal energy storage property doesn't include:

- A swimming pool,
- Combined heat and power system property, or
- A building or its structural components.

Enter the basis on Line 12hh Worksheet, line 1, attributable to periods after 2022, of any energy storage technology property placed in service during the tax year, to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after August 16, 2022. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Qualified biogas property. Qualified biogas property means property comprising a system that:

1. Converts biomass (as defined in section 45K(c)(3), as in effect on August 16, 2022), into a gas that:
 - a. Consists of not less than 52% methane by volume, or
 - b. Is concentrated by such system into a gas that consists of not less than 52% methane, and
2. Captures such gas for sale or productive use, and not for disposal via combustion.

Qualified biogas property includes any property that is part of a system that cleans or conditions gas, described above.

Enter the basis on Line 12hh Worksheet, line 2, attributable to periods after 2022, of any qualified biogas energy property placed in service during the tax year, to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after August 16, 2022. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Microgrid controller. Microgrid controller means equipment that is:

- Part of a qualified microgrid, and
- Designed and used to monitor and control the energy resources and loads on such microgrid.

Qualified microgrid. Qualified microgrid is an electrical system that:

1. Includes equipment that is capable of generating not less than 4 kilowatts and not greater than 20 megawatts of electricity;
2. Is capable of operating:
 - a. In connection with the electrical grid and as a single controllable entity with respect to such grid,
 - b. Independently (and disconnected) from such grid, and
3. Is not part of a bulk-power system (as defined in section 215 of the Federal Power Act (16 U.S.C. 824o)).

Enter the basis on Line 12hh Worksheet, line 3, attributable to periods after 2022, of any qualified microgrid controller property placed in service during the tax year, to the extent of basis attributable to construction, reconstruction, or erection by the taxpayer after August 16, 2022. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Domestic content bonus credit amount. In the case of any energy project that satisfies the requirement below, the energy percentage shall be increased by the applicable credit rate increase.

Applicable credit rate increase. The applicable credit rate increase shall be the one of the following.

1. 2%, in the case of an energy project that doesn't satisfy the requirements below.
2. 10%, in the case of an energy project that does satisfy the requirements below.

Requirement. The requirement is satisfied with respect to any qualified facility, if the taxpayer certifies to the Secretary (at such time and in such form and manner as the Secretary may prescribe) that any steel, iron, or manufactured product that is a component of the facility (upon completion of construction) was produced in the United States.

In the case of steel or iron, the manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives. The steel and iron requirements apply to all construction materials made primarily of steel or iron and used in infrastructure projects such as transit or maintenance facilities, rail lines, and bridges. These items include, but are not limited to, structural steel or iron, steel or iron beams and columns, or running rail and contact rail. These requirements don't apply to steel or iron used as components or subcomponents of other manufactured products or rolling stock, or to bimetallic power rail incorporating steel or iron components.

In the case of manufactured products that are components of a qualified facility, upon completion of construction the manufactured products will be deemed to have been produced in the United States if at least 40% of steel and iron (20% in the case of an offshore wind facility) of the total costs of all the manufactured products of the facility are attributable to manufactured products (including components) that are mined, produced, or manufactured in the United States.

Enter the domestic content bonus credit amount on the Line 12hh Worksheet, line 4. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Increase in credit rate for energy communities. In the case of any energy project that is placed in service within an energy community (defined below), the energy percentage shall be increased by the applicable credit rate increase.

Applicable credit rate increase. The applicable credit rate increase shall be equal to one of the following.

1. 2%, in the case of any energy project that doesn't satisfy the requirements of section 48(a)(9)(B).
2. 10%, in the case of any energy project that does satisfy the requirements of section 48(a)(9)(B).

Energy community. Energy community means the following.

1. A brownfield site (as defined in subparagraphs (A), (B), and (D)(ii)(III) of section 101(39) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(39))); or
2. A metropolitan statistical area or non-metropolitan statistical area that:
 - a. Has (or, at any time during the period beginning after 2009, had) .17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil, or natural gas (as determined by the Secretary); and
 - b. Has an unemployment rate at or above the national average unemployment rate for the previous year (as determined by the Secretary); or
3. A census tract, or is directly adjoining to any census tract in which:
 - a. After 1999, a coal mine has closed; or
 - b. After 2009, a coal-fired electric generating unit has been retired.

Enter the increase in credit rate for energy communities on Line 12hh Worksheet, line 5. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Certain solar and wind facilities placed in service in connection with low-income communities. A qualified solar or wind facility must receive an allocation of the environmental justice solar and wind capacity limitation for a taxpayer with an interest in such qualified facility to be eligible to claim an energy percentage increase under section 48(e) with respect to eligible property which is part of such facility. Guidance regarding the section 48(e) program and how the taxpayer can apply for an allocation of the environmental justice solar and wind capacity limitation will be provided at a later date. Please consult this guidance when completing Form 3468.

For the latest guidance related to certain solar and wind facilities in connection with low-income communities, go to [IRS.gov/Form3468](https://www.irs.gov/Form3468).

Energy percentage increase with respect to eligible property and limitation:

- 10%, in the case of a facility located in a low-income community (as defined in section 45D(e)) or on Indian land (as defined in section 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2))); or
- 20%, in the case of a facility that is part of a qualified low-income residential building project or a qualified low-income economic benefit project.

The increase in the credit will not exceed the amount that bears the same ratio to the amount of the increase of the following.

- The environmental justice solar and wind capacity limitation allocated to such facility bears to
- The total megawatt nameplate capacity of such facility, as measured in direct current.

Qualified solar and wind facility. Qualified solar and wind facility with respect to low-income communities means any

facility that generates electricity solely from property described in the following:

- Wind facility property defined in section 45(d)(1);
- Solar energy property to generate electricity defined in section 48(a)(3)(i); or
- Qualified small wind energy property defined in section 48(a)(3)(vi).

The property has to meet the following:

- A maximum net output of less than 5 megawatts (as measured in alternating current); and
- Is located in a low-income community (as defined in section 45D(e)) or on Indian land (as defined in section 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2))), or is part of a qualified low-income residential building project or a qualified low-income economic benefit project.

Eligible property. Eligible property means energy property that is part of the following facilities.

- Wind facility property described in section 45(d)(1) for which an election was made to treat qualified facilities as energy property.
- Solar energy property to generate electricity described in section 48(a)(3)(A)(i).
- Qualified small wind energy property described in section 48(a)(3)(A)(vi).
- Energy storage technology described in section 48(a)(3)(A)(ix) installed in connection with the above facility properties.

Enter the amount attributable to certain solar and wind facilities placed in service in connection with low-income communities on Line 12hh Worksheet, line 6. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#), later, for more information.

Election to treat clean hydrogen production facilities as energy property. In the case of any qualified property (as defined in section 48(a)(5)(D)) that is part of a specified clean hydrogen production facility, such property will be treated as energy property for purposes of this section, and the energy percentage with respect to such property is as follows.

- 1.2%, in the case of a facility that is designed and reasonably expected to produce qualified clean hydrogen, described in section 45V(b)(2)(A).
- 1.5%, in the case of a facility that is designed and reasonably expected to produce qualified clean hydrogen that is described in section 45V(b)(2)(B).
- 2%, in the case of a facility that is designed and reasonably expected to produce qualified clean hydrogen that is described in section 45V(b)(2)(C).
- 6%, in the case of a facility that is designed and reasonably expected to produce qualified clean hydrogen that is described in section 45V(b)(2)(D).

Denial of production credit. No credit will be allowed under section 45V or section 45Q for any tax year with respect to any specified clean hydrogen production facility or any carbon capture equipment included at such facility.

Specified clean hydrogen production facility. Specified clean hydrogen production facility means any qualified clean hydrogen production facility to include the following.

- Owned by the taxpayer.
- Produces qualified clean hydrogen.
- The construction of which began before 2033.
- Is placed in service after 2022.
- No credit has been allowed under section 45V or 45Q.
- The taxpayer makes an irrevocable election.
- An unrelated third party has verified (in such form or manner as the Secretary may prescribe) that such facility produces hydrogen through a process that results in lifecycle greenhouse gas emissions that are consistent with the hydrogen that the facility was designed and expected to

produce in the [Election to treat clean hydrogen production facilities as energy property](#), described earlier.

Qualified clean hydrogen. Qualified clean hydrogen means hydrogen that is produced through a process that results in a lifecycle greenhouse gas emissions rate of not greater than 4 kilograms of CO₂e per kilogram of hydrogen.

Additional requirements for qualified clean hydrogen. Qualified clean hydrogen also requires the following.

- Hydrogen is produced in the United States (as defined in section 638(1)) or a possession of the United States (as defined in section 638(2)).
- Hydrogen is produced in the ordinary course of a trade or business of the taxpayer.
- Hydrogen is produced for sale or use.
- The production and sale or use of such hydrogen is verified by an unrelated party.

Provisional emissions rate. In the case of any hydrogen for which a lifecycle greenhouse gas emissions rate has not been determined for purposes of this section, a taxpayer producing such hydrogen may file a petition with the Secretary for determination of the lifecycle greenhouse gas emissions rate with respect to such hydrogen.

Regulations. The Secretary shall issue guidance to carry out the purposes of this section, including guidance to recapture any credit allowed that exceeds the amount of the credit that would have been allowed if the expected production were consistent with the actual verified production (or all of the credit so allowed in the absence of such verification).

Enter the amount of clean hydrogen production facilities that will be treated as energy property on Line 12hh Worksheet, line 7. Attach to your return a statement with the description of how you calculated the credit. See [Additional information](#) below for more information.

Additional information. You must attach a statement to Form 3468 that includes the following information.

1. Your name, address, taxpayer identification number, and telephone number.
2. For each qualified investment credit facility property, include the following.
 - a. A detailed technical description of the facility, including generating capacity.
 - b. A detailed technical description of the energy property placed in service during the tax year as an integral part of the facility, including a statement that the property is an integral part of such facility.
 - c. The date that the energy property was placed in service.
 - d. An accounting of your basis in the energy property.
 - e. A depreciation schedule reflecting your remaining basis in the energy property after the energy credit is claimed.
3. A statement that you haven't and won't claim a Section 1603 grant for new investment in the property for which you are claiming the energy credit.
4. A declaration, applicable to the statement and any accompanying documents, signed by you, or signed by a person currently authorized to bind you in such matters that state the following: "Under penalties of perjury, I declare that I have examined this statement, including accompanying documents, and to the best of my knowledge and belief, the facts presented in support of this statement are true, correct, and complete."

Line 12hh Worksheet

Use the following worksheet to calculate the amount to be entered on Form 3468, line 12hh. This worksheet is generally applicable for property placed in service after 2022.

1. Energy storage technology property basis *	_____ × 30% (0.30)	1. _____
2. Qualified biogas property basis *	_____ × 30% (0.30)	2. _____
3. Microgrid controller basis *	_____ × 30% (0.30)	3. _____
4. Domestic content bonus credit **		
4a. Doesn't satisfy requirements in section 45(b)(9)(B). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 4a of the worksheet. Enter the total basis amount and multiply by the applicable credit rate increase	_____ × 2% (0.02)	4a. _____
4b. Satisfies requirements in section 45(b)(9)(B). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 4b of the worksheet. Enter the basis amount and multiply by the applicable credit rate increase	_____ × 10% (0.10)	4b. _____
5. Energy communities **		
5a. Doesn't satisfy requirements in section 48(a)(9)(B). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 5a of the worksheet. Enter the total basis amount and multiply by the applicable credit rate increase	_____ × 2% (0.02)	5a. _____
5b. Satisfies requirements in section 48(a)(9)(B). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 5b of the worksheet. Enter the total basis amount and multiply by the applicable credit rate increase	_____ × 10% (0.10)	5b. _____
6. Certain solar and wind facilities in connection with low-income communities **		
6a. Facility located in a low-income community per section 45D(e). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 6a of the worksheet. Enter the total basis amount and multiply by the energy percentage increase	_____ × 10% (0.10)	6a. _____
6b. Facility located in a low-income community on Indian land per section 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2)). List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 6b of the worksheet. Enter the total basis amount and multiply by the energy percentage increase	_____ × 10% (0.10)	6b. _____
6c. Qualified low-income residential building project facility. List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 6c of the worksheet. Enter the total basis amount and multiply by the energy percentage increase	_____ × 20% (0.20)	6c. _____
6d. Qualified low-income economic benefit project. List the line numbers from the Form 3468 used for this calculation.		

Add the basis in property for the line numbers you entered on line 6d of the worksheet. Enter the total basis amount and multiply by the energy percentage increase	_____ × 20% (0.20)	6d. _____

* For fiscal year filers, the project of which construction begins on January 29, 2023, or later, the credit amounts are 6% and 2% respectively, unless the prevailing wage and apprenticeship requirements are satisfied or the project has a maximum net output of less than 1 megawatt of electrical or thermal energy. See [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

** Each percent applies to a unique property. One property cannot have the different percent added on within a line.

Line 12hh Worksheet, *continued*

7. Clean hydrogen production facilities as energy property **

7a. Facility that is designed and reasonably expected to produce qualified clean hydrogen per section 45V(b)(2)(A). List the line numbers from the Form 3468 used for this calculation.

Add the basis in property for the line numbers you entered on line 7a of the worksheet. Enter the total basis amount and multiply by the energy percentage increase $\times 1.2\% (0.012)$ **7a.** _____

7b. Facility that is designed and reasonably expected to produce qualified clean hydrogen per section 45V(b)(2)(B). List the line numbers from the Form 3468 used for this calculation.

Add the basis in property for the line numbers you entered on line 7b of the worksheet. Enter the total basis amount and multiply by the energy percentage increase $\times 1.5\% (0.015)$ **7b.** _____

7c. Facility that is designed and reasonably expected to produce qualified clean hydrogen per section 45V(b)(2)(C). List the line numbers from the Form 3468 used for this calculation.

Add the basis in property for the line numbers you entered on line 7c of the worksheet. Enter the total basis amount and multiply by the energy percentage increase $\times 2\% (0.02)$ **7c.** _____

7d. Facility that is designed and reasonably expected to produce qualified clean hydrogen per section 45V(b)(2)(D). List the line numbers from the Form 3468 used for this calculation.

Add the basis in property for the line numbers you entered on line 7d of the worksheet. Enter the total basis amount and multiply by the energy percentage increase $\times 6\% (0.06)$ **7d.** _____

8. Total. Combine lines 1 through 7. Enter this amount on Form 3468, line 12hh **8.** _____

* For fiscal year filers, the project of which construction begins on January 29, 2023, or later, the credit amounts are 6% and 2% respectively, unless the prevailing wage and apprenticeship requirements are satisfied or the project has a maximum net output of less than 1 megawatt of electrical or thermal energy. See [Increased credit amount for energy projects](#), earlier, for information regarding project requirements.

** Each percent applies to a unique property. One property cannot have the different percent added on within a line.

Line 13

Patrons, including cooperatives that are patrons in other cooperatives, enter the unused investment credit from the

rehabilitation credit or energy credit allocated from cooperatives. If you are a cooperative, see the instructions for Form 3800, Part III, line 1a, for allocating the investment credit to your patrons.

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	18 hr., 39 min.
Learning about the law or the form	6 hr., 21 min.
Preparing and sending the form to the IRS	10 hr., 55 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.
