



Frequently asked questions about energy efficient home improvements and residential clean energy property credits

FS-2022-40, December 2022

Note: These frequently asked questions are superseded by FAQs that were posted in [FS-2025-01](#) on January 2025.

This Fact Sheet issues frequently asked questions about energy efficient home improvements and residential clean energy property credits.

These FAQs are being issued to provide general information to taxpayers and tax professionals as expeditiously as possible. Accordingly, these FAQs may not address any particular taxpayer's specific facts and circumstances, and they may be updated or modified upon further review. Because these FAQs have not been published in the Internal Revenue Bulletin, they will not be relied on or used by the IRS to resolve a case. Similarly, if an FAQ turns out to be an inaccurate statement of the law as applied to a particular taxpayer's case, the law will control the taxpayer's tax liability. Nonetheless, a taxpayer who reasonably and in good faith relies on these FAQs will not be subject to a penalty that provides a reasonable cause standard for relief, including a negligence penalty or other accuracy-related penalty, to the extent that reliance results in an underpayment of tax. Any later updates or modifications to these FAQs will be dated to enable taxpayers to confirm the date on which any changes to the FAQs were made. Additionally, prior versions of these FAQs will be maintained on IRS.gov to ensure that taxpayers, who may have relied on a prior version, can locate that version if they later need to do so.

More information about [reliance is available](#). These FAQs were announced in [IR-2022-225](#).

Energy Efficient Home Improvement Credit and the Residential Clean Energy Property Credit Frequently Asked Questions

Background

Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA), amended the credits for energy efficient home improvements under § 25C of the Internal Revenue Code (Code) and residential energy property under § 25D of the Code. These FAQs provide details on the IRA's changes to these tax credits, information on eligible expenditures, and provides examples of how the credit limitations work.

General Overview of the Energy Efficient Home Improvement Credit

Through December 31, 2022, the energy efficient home improvement credit is a \$500 lifetime credit. As amended by the IRA, the energy efficient home improvement credit is increased for years after 2022, with an annual credit of generally up to \$1,200. Beginning January 1, 2023, the amount of the credit is equal to 30% of the sum of amounts paid by the taxpayer for certain qualified expenditures, including (1) qualified energy efficiency improvements installed during the year, (2) residential energy property expenditures during the year, and (3) home energy audits during the year. There are limits on the allowable annual credit and on the amount of credit for certain types of qualified expenditures (see Q 1 and 2 below). The credit is allowed for qualifying property placed in service on or after January 1, 2023, and before January 1, 2033.

General Overview of the Residential Clean Energy Property Credit

The residential clean energy property credit is a 30-percent credit for certain qualified expenditures made by a taxpayer for residential energy efficient property. The IRA extended the residential clean energy property credit through 2034,



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modified the applicable credit percentage rates, and added battery storage technology as an eligible expenditure. The credit applies for property placed in service after December 31, 2021, and before January 1, 2033. The credit percentage rate phases down to 26 percent for property placed in service in 2033, 22 percent for property placed in service in 2034, and no credit is available for property placed in service after December 31, 2034.

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Energy Efficient Home Improvement Credit: Qualifying Expenditures and Credit Amount

Q1. What home improvements are eligible for the Energy Efficient Home Improvement Credit, and how much is the credit? (added December 22, 2022)

A1. The following energy efficient home improvements are eligible for the Energy Efficient Home Improvement Credit:

- Building envelope components satisfying the energy efficiency requirements in Q1 under the [Energy Efficiency Requirements](#) section:
 - exterior doors (30% of costs up to \$250 per door, up to a total of \$500);
 - exterior windows and skylights (30% of costs up to \$600); and
 - insulation materials or systems and air sealing materials or systems (30% of costs).
- Home energy audits (30% of costs up to \$150, see Q5 under [General Questions](#) section).
- Residential energy property (30% of costs, including labor, up to \$600 for each item) satisfying the energy efficiency requirements in Q1 under the [Energy Efficiency Requirements](#) section:
 - central air conditioners;
 - natural gas, propane, or oil water heaters;
 - natural gas, propane, or oil furnaces and hot water boilers; and
 - improvements to or replacements of panelboards, sub-panelboards, branch circuits, or feeders that are installed along with building envelope components or other energy property listed in these FAQs and enable its installation and use.
- Heat pumps and biomass stoves and biomass boilers (30% of costs, including labor) satisfying the energy efficiency requirements in Q1 under the [Energy Efficiency Requirements](#) section:
 - electric or natural gas heat pump water heaters;
 - electric or natural gas heat pumps; and
 - biomass stoves and biomass boilers.



Q2. Is there a limit on the amount of the Energy Efficient Home Improvement Credit that I can claim? (added December 22, 2022)

A2. Yes. There is a \$1,200 aggregate yearly tax credit maximum for all building envelope components, home energy audits, and energy property. Electric or natural gas heat pump water heaters, electric or natural gas heat pumps, and biomass stoves and biomass boilers have a separate aggregate yearly credit limit of \$2,000. Thus, the maximum total yearly energy efficient home improvement credit amount may be up to \$3,200. See Q1 under the Examples section, for a set of examples illustrating how these credit limits work.

Residential Clean Energy Property Credit: Qualifying Expenditures and Credit Amount

Q1. What residential clean energy expenditures are eligible for the Residential Clean Energy Property Credit, and how much is the credit? (added December 22, 2022)

A1. The following residential clean energy expenditures are eligible for a Residential Clean Energy Property Credit of 30% of the cost:

- solar electric property expenditures (solar panels);
- solar water heating property expenditures (solar water heaters);
- fuel cell property expenditures;
- small wind energy property expenditures (wind turbines);
- geothermal heat pump property expenditures; and
- battery storage technology expenditures.

Q2. Are roofing expenditures that were necessary for the installation of solar panels eligible for the Residential Clean Energy Property Credit? (added December 22, 2022)

A2. In general, traditional roofing materials and structural components do not qualify for the Residential Clean Energy Property Credit because they primarily serve a roofing or structural function. However, some solar roofing tiles and solar roofing shingles serve as solar electric collectors while also performing the function of traditional roofing, serving both the functions of solar electric generation and structural support and such items qualify for the credit.

Q3. Is there a dollar limit on the Residential Clean Energy Property Credit? (added December 22, 2022)

A3. No, there is no overall dollar limit for the Residential Clean Energy Property Credit. The credit is generally limited to 30% of qualified expenditures made for property placed in service beginning in 2022 through 2032. However, the credit allowed for fuel cell property expenditures is 30% of the expenditures up to a maximum credit of \$500 for each half kilowatt of capacity of the qualified fuel cell property. In the case of a residence or dwelling unit that is jointly occupied by two or more individuals, the maximum amount of such fuel cell property expenditures used to calculate the total Residential Clean Energy Property Credit amount for all individuals living in that dwelling unit during a calendar year is limited to \$1,667 for each half kilowatt of capacity of qualified fuel cell property.

Energy Efficiency Requirements

Q1. What energy efficiency requirements must be met to qualify for the Energy Efficient Home Improvement Credit? (added December 22, 2022)



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A1. The following energy efficiency requirements must be met to qualify for the Energy Efficient Home Improvement Credit:

- Exterior doors: must meet applicable Energy Star requirements.
- Windows and skylights: must meet Energy Star most efficient certification requirements.
- Insulation materials or systems and air sealing materials or systems: must meet the criteria established by the International Energy Conservation Code (IECC) standard in effect at the start of the year that is two years prior to the year the materials or systems are placed in service. For example, materials or systems placed in service in 2025 must meet the criteria established by the IECC standard in effect on January 1, 2023, to qualify for the Energy Efficient Home Improvement Credit in 2025.
- Electric or natural gas heat pumps, electric or natural gas heat pump water heaters, central air conditioners, natural gas or propane or oil water heaters, natural gas or propane or oil furnaces or hot water boilers: must meet or exceed the highest efficiency tier (not including any advanced tier) established by the Consortium for Energy Efficiency (CEE) that is in effect as of the beginning of the year in which the property is placed in service. See also the [CEE Directory of Efficient Equipment](#) for a searchable database of qualifying equipment.
- Oil furnaces or hot water boilers can alternately qualify if they (1) meet or exceed 2021 Energy Star efficiency criteria and are rated by the manufacturer for use with fuel blends at least 20 percent of the volume of which consists of an eligible fuel; or (2) if placed in service after December 31, 2026, achieves an annual fuel efficiency rate of not less than 90 and is rated by the manufacturer for use with fuel blends at least 50 percent of which consists of an eligible fuel.
- Biomass stove or biomass boilers: must have a thermal efficiency rating of at least 75% (measured by the higher heating value of the fuel).
- Panelboards, sub-panelboards, branch circuits, or feeders: must be installed according to the National Electric Code and have a load capacity of 200 amps or greater.

Q2. What energy efficiency requirements must be met to qualify for the Residential Clean Energy Property Credit? (added December 22, 2022)

A2. The following energy efficiency requirements must be met to qualify for the Residential Clean Energy Property Credit:

- Solar water heating property: must be certified for performance by the non-profit Solar Rating Certification Corporation or a comparable entity endorsed by the government of the State in which such property is installed.
- Geothermal heat pump property: must meet the requirements of the Energy Star program which are in effect at the time that the expenditure for such equipment is made.
- Battery storage technology property: must have a capacity of 3 kilowatt-hours or greater.

Qualifying Residence

Q1. What type of residence qualifies for these credits? For example, are the credits available for improvements made to a second home or to a home rented by the taxpayer? (added December 22, 2022)

A1. The credits are available only for certain improvements made to second homes, and the credits are never available when the improvements are made to homes not used as a residence by the taxpayer. For example, landlords can never use these credits for improvements made to any homes they rent out but do not use as a residence themselves.



However, if a taxpayer is renting a home as their principal residence and makes eligible improvements, a tax credit may be available to such tenant.

- For the Energy Efficient Home Improvement Credit, the following requirements apply:
 - exterior doors, windows and skylights, insulation materials or systems, and air sealing materials or systems: the home must be located in the United States and must be owned and used by the taxpayer as the taxpayer's principal residence¹;
 - central air conditioners; natural gas, propane, or oil water heaters; natural gas, propane or oil furnaces or hot water boilers; electric or natural gas heat pumps; electric or natural gas heat pump water heaters; biomass stoves or biomass boilers; and improvements to panelboards, sub-panelboards, branch circuits, or feeders: the home must be located in the United States and used as a residence by the taxpayer (includes renters); and
 - home energy audits: the home must be located in the United States and owned or used by the taxpayer as the taxpayer's principal residence (includes renters).
- For the Residential Clean Energy Property Credit, the following requirements apply:
 - solar water heating property expenditures, solar electric property expenditure, small wind energy property expenditures, geothermal heat pump property expenditures, and battery storage technology expenditures: the home must be located in the United States and used as a residence by the taxpayer (includes renters); and
 - fuel cell property expenditures: the home must be located in the United States and used as a principal residence by the taxpayer (includes renters).

Q2. Can a taxpayer claim the credits for expenditures incurred for an existing home? What about a newly constructed home? (added December 22, 2022)

A2. The rules vary by credit.

- Under the Energy Efficient Home Improvement Credit: a taxpayer can claim the credit only for qualifying expenditures incurred for an existing home or for an addition to or renovation of an existing home, and not for a newly constructed home.
- Under the Residential Clean Energy Property Credit: a taxpayer can claim the credit for qualifying expenditures incurred for either an existing home or a newly constructed home.

Q3. May a taxpayer claim a credit if the qualified property is also used for business purposes, such as in a dwelling unit in which the taxpayer also conducts a business? (added December 22, 2022)

A3. For both credits, if a taxpayer uses property solely for business purposes, the property will not qualify for the credit. A taxpayer who qualifies for the credits and whose use of the qualified property for business purposes is not more than 20 percent may claim the full credit. For a taxpayer who otherwise qualifies for the credits, but whose use of the qualified property for business purposes exceeds 20 percent, the taxpayer must calculate the amount of credit by

¹ THE PRINCIPAL RESIDENCE OF A TAXPAYER IS DETERMINED BY TAKING INTO ACCOUNT ALL THE FACTS AND CIRCUMSTANCES, SUCH AS THEIR PLACE OF EMPLOYMENT AND MAILING ADDRESS FOR BILLS AND CORRESPONDENCE, BUT ORDINARILY WILL BE THE PROPERTY WHERE THE TAXPAYER SPENDS THE MAJORITY OF THEIR TIME. TREAS. REG. § 1.121-1(b).



including only that portion of the expenditures for the property that are properly allocable to use for nonbusiness purposes.

Labor Costs

Q1. May a taxpayer include labor costs when calculating the credits? (added December 22, 2022)

A1. The rules vary by credit.

- When calculating the Energy Efficient Home Improvement Credit, a taxpayer may include the labor costs for the onsite preparation, assembly, or original installation of residential energy property such as central air conditioners; natural gas, propane, or oil water heaters; natural gas, propane, or oil furnaces or hot water boilers; electric or natural gas heat pumps; electric or natural gas heat pump water heaters; biomass stoves or biomass boilers; or improvements to panelboards, sub-panelboards, branch circuits, or feeders. In contrast, a taxpayer may not include the labor costs for qualified energy efficient building envelope components including a qualifying insulation material or system, exterior window, skylight, or exterior door. Thus, for an energy efficient building envelope component for which a taxpayer pays a fixed price, the taxpayer must make a reasonable allocation between the qualifying cost of the property and the nonqualifying labor cost of the installation.
- When calculating the Residential Clean Energy Property Credit, a taxpayer may include the labor costs properly allocable to the onsite preparation, assembly, or original installation of the qualified property and for piping or wiring to interconnect the qualifying property to the home.

Timing of Credits

Q1. May a taxpayer claim the credits in the year of purchase if installation of the qualifying property occurs in a later year? (added December 22, 2022)

A1. No. A taxpayer may not claim the credits until the year the property is installed.

Q2. Are there any requirements for how long the property must remain in use to qualify for the credits? (added December 22, 2022)

A2. In the case of building envelope components for which an Energy Efficient Home Improvement Credit is available (exterior doors, windows, skylights, insulation and air sealing materials or systems), the component must reasonably be expected to remain in use for at least 5 years. This requirement does not apply to other property discussed in these FAQs.

Q3. Is there a lifetime limit on the credits? (added December 22, 2022)

A3. No. There is no lifetime limit for either credit; the limits for the credits are determined on a yearly basis. For example, beginning in 2023, a taxpayer can claim the maximum Energy Efficient Home Improvement Credit allowed every year that eligible improvements are made.

Q4. May a taxpayer carry forward unused credits to another tax year? (added December 22, 2022)

A4. The rules vary by credit.

- Under the Energy Efficient Home Improvement Credit: a taxpayer may not carry the credit forward. Thus, if a taxpayer does not have sufficient tax liability to claim all or a portion of the credit in the year in which the related property for which the qualifying expenditure is placed in service, the unused amount of the credit may never be claimed.



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- Under the Residential Clean Energy Property Credit: a taxpayer may carry forward the unused amount of the credit to reduce tax liability in future tax years.

General Questions

Q1. Will a taxpayer qualify for the credits if the property installed has been used by another individual? (added December 22, 2022)

A1. No. Used property is not eligible for the Energy Efficient Home Improvement Credit or the Residential Clean Energy Property Credit.

Q2. Are the credits refundable or nonrefundable? (added December 22, 2022)

A2. Both the Energy Efficient Home Improvement Credit and the Residential Clean Energy Property Credit are nonrefundable personal tax credits. A taxpayer claiming a nonrefundable credit can only use it to decrease or eliminate tax liability. A taxpayer will not receive a tax refund for any amount that exceeds the taxpayer's tax liability for the year.

Q3. Is a taxpayer who is subject to the alternative minimum tax (AMT) eligible to claim the credits? (added December 22, 2022)

A3. Yes. A taxpayer who is subject to the AMT is eligible to claim both the Energy Efficient Home Improvement Credit and the Residential Clean Energy Property Credit and may offset the AMT with those credits.

Q4. What happens to the Energy Efficient Home Improvement Credit or the Residential Clean Energy Property Credit if a government or a public utility provides a subsidy (for example, an incentive, grant, or rebate) to a taxpayer to purchase or install a qualifying property? (added December 22, 2022)

A4. The answer depends on the facts that apply to each taxpayer.

- **Public Utility.** Generally, if a public utility provides (directly or indirectly) a subsidy to a customer for the purchase or installation of any energy conservation measure, the value of the subsidy is not included in the customer's gross income. But as a result, the taxpayer may not claim a credit for the amount of the subsidy that is used to purchase or install qualifying property. This rule applies whether a third-party contractor receives a subsidy on behalf of the taxpayer or the taxpayer receives the subsidy directly. However, payments from a public utility to compensate for excess generated electricity not consumed by the taxpayer but delivered to the utility's electrical grid (for example, net metering credits) are not subsidies for installing qualifying property and do not affect the taxpayer's credit qualification or amounts.
- **Rebates.** Rebates generally represent a reduction in the purchase price or cost of property, and the taxpayer must reduce the amount of the expenditure on which the taxpayer calculates the tax credit by the amount of the rebate. In general, rebates are nontaxable purchase price reductions if they are based on or related to the cost of the property; received from someone having a reasonable connection to the sale of the property (for example, the manufacturer, distributor, or seller/installer) and do not represent payment or compensation for services provided by the taxpayer.
- **State Energy-Efficiency Incentives.** A state may provide incentives to encourage taxpayers to purchase property that also qualifies for an Energy Efficient Home Improvement Credit or the Residential Clean Energy Property Credit. Generally, a taxpayer is not required to reduce the purchase price or cost of property acquired with a governmental energy-efficiency incentive unless that incentive qualifies as a rebate under federal income tax law. While many states label their energy-efficiency incentives as "rebates," these incentives may not qualify as rebates or purchase-price adjustments under federal income tax law and could be included in the taxpayer's gross income for federal income tax purposes.



Q5. What are the requirements for a home energy audit to qualify for the Energy Efficient Home Improvement Credit? (added December 22, 2022)

A5. The audit must include an inspection of a dwelling, including condominiums and certain manufactured homes, located in the United States that is owned or used by the taxpayer as the taxpayer's principal residence. The home energy auditor must provide a written report (to the taxpayer) that identifies the most significant and cost-effective energy efficiency improvements for that dwelling, including an estimate of the energy and cost savings for each such improvement. The auditor must meet the certification or other requirements specified by the Department of the Treasury and the Internal Revenue Service in forthcoming guidance.

Examples

Q1. Can you illustrate how the various credit limits of the Energy Efficient Home Improvement Credit operate? (added December 22, 2022)

A1. Here are a few examples to illustrate how the Energy Efficient Home Improvement Credit limits work:

Example 1. In one taxable year, a taxpayer purchases and installs the following: two exterior doors at a cost of \$1,000 each, windows and skylights at a total cost of \$2,200, and one central air conditioner at a cost of \$5,000. All property installed meets the applicable energy efficiency and other requirements for qualifying for the Energy Efficient Home Improvement Credit.

First, 30% of each \$1,000 door's costs is \$300, but the per door limit of \$250 applies to reduce the maximum possible credit for each door to \$250 each. Thus, the taxpayer's expenditures for exterior doors potentially qualify the taxpayer to claim up to a \$500 tax credit.

Next, 30% of the taxpayer's total \$2,200 of expenditures for windows and skylights is \$660, but the \$600 limit for all windows and skylights applies to limit the taxpayer's credit for such expenditures to \$600. Thus, the taxpayer's expenditures for windows and skylights potentially qualify the taxpayer to claim up to \$600.

Finally, 30% of the taxpayer's \$5,000 cost paid for the central air conditioner is \$1,500, but the \$600 per item limit for energy property applies to limit the taxpayer's credit for such expenditures to \$600.

Adding these credit amounts yields a sum of \$1,700 (\$500 + \$600 + \$600), but the aggregate limit of \$1,200 applies to limit the taxpayer's total amount of Energy Efficient Home Improvement Credit to \$1,200.

Example 2. For this example, assume all the same facts as in Example 1 above, except that instead of purchasing and installing a central heat air conditioner at a cost of \$5,000, the taxpayer purchases and installs an electric heat pump at a cost of \$5,000. The heat pump meets the applicable energy efficiency and other requirements for qualifying for the Energy Efficient Home Improvement Credit. Here, 30 percent of the taxpayer's costs for the heat pump is \$1,500, and since the heat pump is in a category of energy property exempted from both the \$600 per item limit and the \$1,200 aggregate limit, the taxpayer can claim an Energy Efficient Home Improvement Credit of \$1,500 for the costs of the heat pump alone.

Accordingly, the taxpayer's total Energy Efficient Home Improvement Credit is \$2,600 (\$500 for the exterior doors + \$600 for the windows and skylights + \$1,500 for the heat pump).

Example 3. For this example, assume all the same facts as in Example 1 above, except that instead of purchasing and installing a central air conditioner at a cost of \$5,000, the taxpayer purchases and installs an electric heat pump at a cost of \$8,000. The heat pump meets the applicable energy efficiency and other requirements for qualifying for the Energy



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Efficient Home Improvement Credit. Assume further that the taxpayer spends \$600 on home energy audits performed by a properly certified home energy auditor. On these facts, 30 percent of the taxpayer's costs for home energy audits is \$180, but the \$150 limit on credits for home energy audits applies to limit the taxpayer's credit for such expenditures to \$150. Adding this credit amount to the credit amounts for the doors, windows, and skylights yields a sum of \$1,250 (\$1,100 + \$150), but the \$1,200 aggregate limit applies to limit the taxpayer's total potential credits for these expenses to \$1,200.

Next, 30% of the taxpayer's \$8,000 cost for the heat pump is \$2,400, and even though the heat pump falls into a category of energy property exempted from both the \$600 per item limit and the \$1,200 aggregate limit, the category is still subject to a separate \$2,000 aggregate limit for electric or natural gas heat pump water heaters, electric or natural gas heat pumps, and biomass stoves and biomass boilers. Thus, the taxpayer can claim a \$2,000 tax credit for the cost of the heat pump alone, and the taxpayer's total Energy Efficient Home Improvement Credit is \$3,200 (\$1,200 for the maximum allowable credit for the doors, windows, skylights, and home energy audit + \$2,000 for the maximum allowable credit for a heat pump).

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