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New Law: New and Improved Energy Tax Credits for Homeowners

The Inflation Reduction Act extends and expands tax credits for making your home more energy efficient.

These include

- a healthy 30 percent credit for installing home solar panels (retroactive for 2022);
- credits for installing energy-efficient windows, doors, and insulation; and
- even a credit for installing a home electric vehicle charger (but oddly, only if you live in a low-income or rural area).

Energy Efficient Home Improvement Credit

The new law renamed the old Non-Business Energy Property Credit as the Energy Efficient Home Improvement Credit and greatly expanded it starting in 2023.

The old credit, which exists until the end of the year, contains a tiny \$500 lifetime cap (yes, lifetime).

Good news. Beginning in 2023, lifetime caps are gone. Instead, there is a \$1,200 overall annual cap on the new credit, along with annual caps for certain types of improvements. This means you can perform energy efficiency projects over several years and collect the credit each year. The credit is non-refundable and lasts through 2032.¹

The new 2023 tax credit is equal to 30 percent of what you spend for²

- qualified energy efficient improvements,
- residential energy property, and
- home energy audits.



Qualified energy-efficient improvements such as exterior windows, skylights, doors, and insulation. To qualify, these must be new improvements expected to last at least five years.³

Exterior windows, skylights, and doors must meet Energy Star requirements, while insulation must meet criteria established by the International Energy Conservation Code, a model energy conservation code.⁴

Residential energy property. These are the costs, including labor, of installing new energy efficient components that heat and/or cool the air inside a home, or heat water in your home. You must use the home as your residence, but it need not be your principal residence—for example, it can be a vacation home. These include the following:⁵

- Heat pumps, water heaters, central air conditioners, furnaces, and hot water boilers that meet the highest efficiency tier (not including advanced tiers) established by the Consortium for Energy Efficiency
- Biomass stoves and boilers with a thermal efficiency rating of at least 75 percent
- Oil furnaces and hot water boilers installed from 2023 through 2026 that use certain fuel blends
- The cost of upgrading a home electric panel or branch circuits to at least 200 amps if necessary to install qualified energy efficiency improvements or other residential energy property

Home energy audits. The energy audit qualifies for the credit. This is an inspection by a home energy auditor certified by the Treasury Department who will identify the most significant and cost-effective energy efficiency improvements you can make and provide a written report.⁶

Annual caps. The total annual cap for almost all types of energy improvements is \$1,200 per year. There are also annual caps for specific types of improvements:⁷

- **Residential energy property.** \$600 annual cap for all forms of residential energy property.
- **Windows and skylights.** \$600 cap for all exterior windows and skylights.
- **Doors.** \$250 for any single exterior door and \$500 for all exterior doors.
- **Home energy audit.** \$150 per year.

Heat pumps, biomass stoves, and boilers have a \$2,000 annual cap, which is not included in the \$1,200 annual limit.⁸

Example. In 2023, Helga Homeowner spends \$1,000 to install one Energy Star door, \$5,000 to install central air conditioning, \$3,000 on five Energy Star windows, and \$6,000 on insulation. Her credit is as follows:

- Door: $\$1,000 \times 30\% = \300 ; capped at \$250
- Central air conditioner: \$5,000; capped at \$600
- Windows: $\$3,000 \times 30\% = \900 ; capped at \$600
- Insulation: $\$6,000 \times 30\% = \$1,800$

Her total credits before the \$1,200 annual cap equal \$3,250. But the total allowable credit is \$1,200.

So, if Helga delays installing the new insulation until 2024, she can get a \$1,200 tax credit for that year as well.

As you can see, beginning in 2023, you can plan your energy improvements to obtain credits in, say, 2023, 2024, and so on.

Starting in 2025, manufacturers will have to create product identification numbers for their products that satisfy the requirements of the Energy Efficient Home Improvement Credit. Taxpayers will have to include the number on their tax returns.⁹

Residential Clean Energy Credit (Solar, Etc.)

For over a decade, the Residential Energy Efficient Property Credit has been available to help homeowners defray the cost of going solar.

The Inflation Reduction Act renames and expands this credit. Now called the Residential Clean Energy Credit, it has increased in amount and has been extended through 2034.¹⁰

The credit goes from 26 percent to 30 percent for eligible property placed in service in any year from 2022 through 2032. The credit then declines to 26 percent for 2033 and 22 percent for 2034.¹¹

Unlike the Energy Efficient Home Improvement Credit, the Residential Clean Energy Credit has no annual or lifetime caps. (But there is an annual cap for fuel cells based on their capacity.)

The credit is non-refundable, but any unused amount can be carried forward to reduce your tax liability in future years.¹²

The average cost of a home solar project is over \$20,000, so this credit can save the typical homeowner more than \$6,000.



You can use this credit for your main home or second home (except for fuel cells). But a taxpayer may not claim the credit for energy improvements made to an investment property, such as rental property, unless it is also used as a residence by the taxpayer.¹³

This credit is used primarily for residential solar panels, but it can also be applied to the cost of purchasing and installing¹⁴

- solar water heaters,
- geothermal heat pumps,
- small residential wind turbines,
- residential fuel cells, and
- storage batteries.

Starting in 2023, biomass fuel stoves no longer qualify for a credit.

Example. Bill installs solar panels in his home. His Residential Clean Energy Credit is equal to 30 percent of the cost of the panels, labor for on-site preparation and assembly, permitting fees and inspection, piping and wiring, storage batteries, and sales taxes. The total cost is \$21,000, so Bill gets a \$6,300 credit.

Many states also offer residential solar tax credits. The federal credit isn't reduced if you get a state credit, but some states do reduce their credits if you get a federal credit.

Home Electric Vehicle Charger Credit

The Inflation Reduction Act extends through 2032 the tax credit for installing a home electric vehicle charger.

The amount of credit remains the same: a non-refundable credit equal to 30 percent of the cost of a home charger, capped at \$1,000.

The credit now applies per charger—for example, if you purchase two home chargers, you can obtain a \$2,000 credit.¹⁵

The credit is also extended to include bidirectional chargers that can be used to power a home and feed energy back into the electricity grid. These are just becoming available and cost more than regular electric vehicle chargers.¹⁶ The credit also now applies to home chargers for two- and three-wheeled vehicles.¹⁷



But the electric vehicle charger credit is subject to a new geographic requirement that will greatly limit its availability. Starting in 2023, it will be available only for homeowners who live in low-income or rural areas.¹⁸

- **Low-income census tract.** The homeowner must live in a low-income census tract that has a poverty rate of at least 20 percent or a median family income that is less than 80 percent of the statewide median.
- **Rural area.** Alternatively, the homeowner must live in a non-urban area. This is an area not designated as an urban area by the U.S. Commerce Department in the most recent census. Less than 20 percent of the U.S. population lives in such rural areas.¹⁹

If the low-income or rural-area rules will deny you the electric charger benefit in 2023, get busy now and get it installed before January 1.

Takeaways

The Inflation Reduction Act extends through 2032 the tax credit for installing various types of energy efficient home improvements.

The credit, renamed the Energy Efficient Home Improvement Credit, is increased to 30 percent of the cost of purchasing and installing qualifying property. The lifetime cap on the credit is eliminated; instead, a \$1,200 annual cap is implemented along with annual caps for certain improvements.

This means you can perform energy efficiency projects over several years and collect a credit of up to \$1,200 each year.

The Energy Efficient Home Improvement Credit can be used for energy efficient exterior windows, skylights, doors, home insulation, heat pumps, water heaters, central air conditioners, furnaces, hot water boilers, biomass stoves and boilers, and electric panel upgrades (heat pumps, biomass stoves, and boilers have a \$2,000 annual cap).

The tax credit for installing residential solar panels is increased to 30 percent retroactively for 2022 and is extended through 2034. The credit also applies to storage batteries. This credit is non-refundable (it may not exceed your annual tax liability), but credits not used on your 2022 tax return may be carried forward to future years.

A 30 percent tax credit is also available for installing solar water heaters, geothermal heat pumps, small residential wind turbines, and residential fuel cells.

The maximum \$1,000 tax credit for installing a home electric vehicle charger is extended through 2032 and made available also for chargers for two- and three-wheeled vehicles. But starting in 2023, it will be available only for homeowners who live in low-income or rural areas. If that's not where you live, get your charger in service before January 1 to obtain the credit this year.

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- 1 IRC Section 25C(i)(2), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 2 IRC Section 25C(a), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 3 IRC Section 25C(c)(1), (3), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 4 IRC Section 25C(c)(2), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301. Also, see International Energy Conservation Code.
- 5 IRC Section 25C(d)(2), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 6 IRC Section 25C(e), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 7 IRC Section 25C(b), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 8 IRC Section 25C(b)(5), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 9 IRC Section 25C(h), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13301.
- 10 IRC Section 25D(h), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13302(a)(1).
- 11 IRC Section 25D(g), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13302(a).
- 12 IRC Section 25D(c).
- 13 IRS Notice 2013-70, Sec. 3, Q-6.
- 14 IRC Section 25D(a), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13302(b).
- 15 IRC Sections 30C(a); 30C(b) as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Sections 13404(a), 13404(e).
- 16 IRC Section 30C(c)(2), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13404(c).
- 17 IRC Section 30C(f)(2), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13404(f)(2).
- 18 IRC Section 30C(c)(3), as amended by the Inflation Reduction Act of 2022 (Pub. L. No. 117-169), Section 13404(e).
- 19 In December 2022, the Commerce Department will issue a map and listing of all urban areas based on the 2020 Census; see United States Census Urban and Rural.