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ESG IMPACT

Heat pumps are an energy upgrade for homeowners that's becoming a climate and financial winner

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KEY POINTS

- Heat pumps are as much as five times more efficient than traditional home heating and cooling systems.
- Incentives being offered through the recently passed Inflation Reduction Act of 2022, as well as state and local government support, make this energy upgrade more financially attractive to homeowners.
- A heat pump can lower utility bills, which have been rising, while also helping to reduce reliance on fossil fuels that contributed to climate change.

Thinking about a home heat pump? New and expanded government incentives, coupled with sharply rising utility costs, make it more compelling.

Especially when used in connection with clean electricity sources like rooftop or community solar, a heat pump — a single electric appliance that can

replace a homeowner's traditional air conditioner and furnace system — can warm and cool a home with less planetary harm.

These investments are becoming more appealing to consumers, too, given **inflation's heavy hand**. **A whopping 87% of U.S. homeowners surveyed said** they experienced higher prices in at least one household service or utility category over the summer, according to **SaveOnEnergy.com**. **There's another** possible bonus: Incentives being offered through the recently passed Inflation Reduction Act of 2022.

“These incentives are not only saving you money now and in the long run on your utility bills, but they are putting our economy on track to reduce consumption of fossil fuels that contribute to climate change,” said Miranda Leppla, director of the Environmental Law Clinic at Case Western Reserve University School of Law. **“It's a win-win.”**

The use of heat pumps will become more common as governments legislate their adoption. [Washington State recently mandated](#) that new homes and apartments be constructed with heat pumps. In July, California Governor Gavin Newsom announced a goal of 3 million climate-ready and climate-friendly homes by 2030 and 7 million by 2035, supplemented by 6 million heat pumps by 2030.

Here are four important things to know about upgrading your home to a heat pump system.

Heat pump cost, savings and efficiency considerations

Heat pumps are appropriate for all climates and are three to five times more energy efficient than traditional heating systems, according to Rewiring America, a nonprofit focused on electrifying homes, businesses and communities.

Rather than generating heat, these devices transfer heat from the cool outdoors into the warm indoors and vice versa during warm weather. Heat pumps rely on electricity instead of natural gas or propane, both of which have a higher carbon emission than renewable electricity such as wind or solar, said Jay S. Golden, director of the Dynamic Sustainability Lab at Syracuse University.

With installation, heat pumps can range from around \$8,000 to \$35,000, depending on factors such as the size of the home and heat pump type, according to Rewiring America, but it estimates the savings could amount to **hundreds of dollars per year for an average household. What's more, it's a long-term play**, since heat pumps that most people will consider installing have an average lifespan of 10 to 15 years, according to Rewiring America.

Electricity costs also tend to be more stable, insulating consumers against gas price volatility, said Joshua Skov, a business and government consultant on sustainability strategy who also serves as an industry mentor and instructor at the University of Oregon.

“While there’s an upfront cost, millions of homeowners would save money with a heat pump over the life of the device,” he said. **“You’ll save even more with the federal government covering a chunk of the upfront cost.”**

Inflation Reduction Act incentives

The Inflation Reduction Act — an expansive climate-protection effort by the federal government — includes multiple incentives to lower the cost of energy-**saving property improvements. These incentives significantly exceed what’s** available to homeowners today, said Jono Anzalone, a lecturer at the University of Southern Maine and the executive director of The Climate Initiative, which empowers students to tackle climate change.

For low-income households, the Inflation Reduction Act covers 100% of the cost of a heat pump, up to \$8,000. For moderate-income households, it covers 50% of your heat pump costs, up to the same dollar limit. Homeowners can use a calculator — such as the one available from [Rewiring America](#) — to determine their eligibility.

If you’re considering multiple green home improvements, keep in mind that the law’s overall threshold for “qualified electrification projects” is up to \$14,000 per household.

Federal tax credits for homeowners

For those who exceed the income threshold for a rebate, there’s the option, starting Jan. 1, to take advantage of the nonbusiness energy property credit, commonly referred to as 25C, said Peter Downing, a principal with Marcum LLP who leads the accounting firm’s tax credits and incentives group.

Homeowners can receive a 30% tax credit for home energy efficiency projects such as heat pumps. In a given year, they can get a credit of up to \$2,000 for installing certain equipment such as a heat pump. This credit will expire after 2032, according to the Congressional Research Service.

There can be another tax credit to homeowners who purchase a geothermal heat pump, which is a more expensive, but longer-lasting option on average. Homeowners can receive an uncapped 30% tax credit for a geothermal heating installation, according to Rewiring America, which estimates an average geothermal installation costs about \$24,000 and lasts twenty to fifty years. That means the average tax credit for this type of pump will be around \$7,200, Rewiring America said.

Rulemaking is still underway for the Inflation Reduction Act. But it is possible eligible consumers will be allowed to receive both a rebate and a credit, Downing said. But the math is not likely to be as straightforward, based on previous IRS guidance on energy rebates backed by the federal government. Say a consumer is entitled to a 50% rebate for a heat pump that costs \$6,000. For purposes of the tax credit, the remaining \$3,000 could be eligible for a 30% tax credit, resulting in a possible credit of \$900, he said.

State and local financial support

States, municipalities and local utility companies may provide rebates for **certain efficient appliances, including heat pumps. “Check with all of them because there are so many different levels of programs, you really need to hunt around,” said Jon Huntley, a senior economist at the Penn Wharton Budget Model who co-authored an analysis of the Inflation Reduction Act’s potential impact on the economy.**

Also be sure to check back frequently to see what new state, local and utility-based incentives may be available because programs are often updated, Golden said. Reputable local contractors should also know about locally available rebates, he said.

Many installers have aggressive financing packages to make heat pump installation more feasible, Anzalone said.