

Electric Appliance Guide

Introduction guide to Inflation Reduction Act (IRA) eligible electric household appliances



What are the IRA-eligible, free or low-cost energy-efficient, bill-saving machines?

- (1) "Rewiring America Go Electric Digital Guide." Rewiring America, www.rewiringamerica.org/IRAguide. Accessed 14 Nov. 2023.
- (2) <https://app.wildgridhome.com/dashboard>
- (3) <https://www.edmunds.com/chevrolet/bolt-ev/>
- (4) <https://www.wired.com/review/span-smart-electrical-panel/>
- (5) <https://www.fixmyhome.com/what-is-a-240-volt-outlet/>

In partnership with:



1

What are heat pumps?

Heat pumps are 3-5 times more efficient than most fossil-fuel based heating/cooling appliances, which may translate to savings on your energy bill.

A heat pump is an all-in-one electrical device that can take the place of both a typical air conditioner and a home heating system (such as a furnace or boiler).



Ductless heat pump

Heat pumps use electricity to move heat between locations, even in temperatures below 20 degrees, by tapping into the energy present in the atmosphere. While not all are designed for extreme cold, certain models can keep your home warm without requiring an additional heating source, even when it's colder than -20°F outside. It is important to consult with installers with choose the right technology for you, as certain heat pumps may not perform as well in colder climates.



In-window heat pump

Depending on the type, heat pumps can cost between \$500-40,000 (incl. installation costs), meaning in some cases they may be fully covered by upcoming rebates.

2

This same heat-transfer concept is also applied in heat pump water heaters, heat pump clothes dryers, and geothermal heat pumps.



Geothermal heat pump



Heat pump water heater



Heat pump clothes dryer



Ducted heat pump

What are electric stoves/induction stoves?

Both induction and electric resistance stoves don't rely on burning fossil fuels, offering greater energy efficiency. They also eliminate the need for gas connections, which commonly release methane, a potent greenhouse gas. Electric resistance stoves heat the cooktop similar to a toaster, while electric induction stoves heat cooking pans directly through a magnetic field.



Induction stove

3

4

What electric vehicles qualify?

Many all electric, plug-in hybrid, and fuel-cell electric vehicles, as well as EV chargers, are eligible for tax credits or upcoming rebates. The majority of electric vehicles available today offer a range of over 200 miles on a single charge, enabling most individuals to fulfill their everyday travel requirements by conveniently charging their EV overnight at home, at an EV charging station, or even at their workplace.

Electric cars offer significantly lower operating costs compared to gas-powered vehicles. With rising and fluctuating gas



Eligible 2023 Chevrolet Bolt (3)

prices, electric vehicles now present a three to sixfold cost advantage in driving expenses, saving hundreds of dollars annually. Additionally, their maintenance expenses are typically half due to fewer moving parts and no need for oil changes. Beyond cost savings, EVs produce no tailpipe emissions and are notably more climate-friendly than gas vehicles due to their remarkable efficiency, even without utilizing clean electricity.

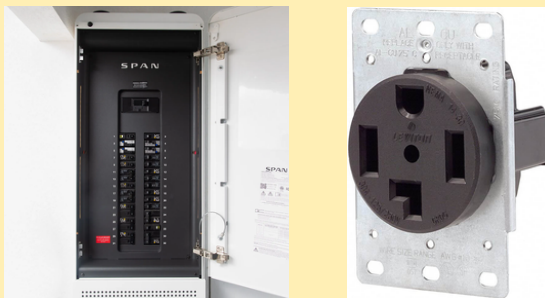
See all eligible vehicles at <https://fueleconomy.gov/feg/tax2023.shtml>



5

What are electric panels/wiring?

Your home's electricity comes from the grid and is distributed through the electrical panel. It's like water flowing through a pipe, measured in Amperes. Older homes handle 60A or 100A, and newer ones 200A or more. To electrify fully, you might need an upgrade based on your home size and needs. Panels are vital for whole-home electrification. Upgrading might need a utility service upgrade. Smart panels, using software, enable full electrification without this upgrade. Choosing between a smart panel or a 200A upgrade depends on your home, plan, and household needs.



Electrical wiring, alongside the panel, is crucial for whole-home electrification. Some appliances need 240V outlets instead of the standard 120V. Upgrading your panel or working on one project is an excellent opportunity to add dedicated circuits and outlets for future electrification. This prepares you for future appliance upgrades, saving time and money by avoiding additional electrician visits.

6

Can this help with weatherization?

Weatherization encompasses various techniques to lessen energy usage for home heating and cooling. These methods include air sealing, insulation, upgrading doors and windows, and improving ventilation. An energy audit often serves as the initial step. For more weatherization programs beyond the IRA, refer to our “Weatherization Assistance” pamphlet.

Solar & Battery Storage

Once the initial investments and installation are completed for rooftop solar, it provides carbon-free electricity at no ongoing cost. Explore more details in our “How to Go Solar” pamphlet!

Learn more!



<https://www.rewiringamerica.org/IRAguide>

Rewiring America's Go Electric Guide



<https://app.wildgridhome.com/dashboard>

Wildgrid Webapp

Be sure to check if your desired appliance meets efficiency rating qualifications, and search for rebate programs with your local utility companies to see if they offer any additional electric appliance incentives!