

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/>

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. (1)

"A heat pump is a single electric appliance that can replace both your traditional air conditioner and home heating system (like a furnace or boiler).



Ductless heat pump (2)

At the simplest level, heat pumps use electricity to move heat from one place to another... How can something move heat from the outside air when it's 20 degrees outside? [Heat] is just energy, and there's energy in the air all the way down to absolute zero, which is -465°F. Heat pumps designed for cold climates can keep your home warm — without a backup heating source — even when outside temperatures are below -20°F" (1). 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



In-window heat pump (2)

climates (2). 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).

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



Geothermal heat pump (2)



Heat pump water heater



Heat pump clothes dryer



Ducted heat pump (2)

What are electric stoves/induction stoves?

"Neither induction nor electric resistance stoves burn fossil fuels, though both are more energy-efficient. They also don't require gas hookups, which often leak methane — a potent greenhouse gas" (1). Electric resistance stoves heat the cooktop similar to a toaster, while electric induction stoves heat cooking pans directly through a magnetic field (1).



Induction stove

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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. “Most EVs on the market today have a range of more than 200 miles on a single charge, which means most people can satisfy all of their daily driving needs by charging their EV overnight at home,” (1) at an EV charging station, or workplace.



Eligible 2023 Chevrolet Bolt (3)

electric cars are now three to six times cheaper to drive than gas vehicles, which translates to hundreds of dollars a year in savings. EVs also typically cost half as much to maintain because they have fewer moving parts and don't require oil changes.” EVs don't produce tailpipe emissions, and “Even without clean electricity, EVs are more climate friendly than gas vehicles because they are so much more efficient.”

“Electric vehicles are much cheaper to operate than gas-powered vehicles. As gas prices get higher and more volatile,

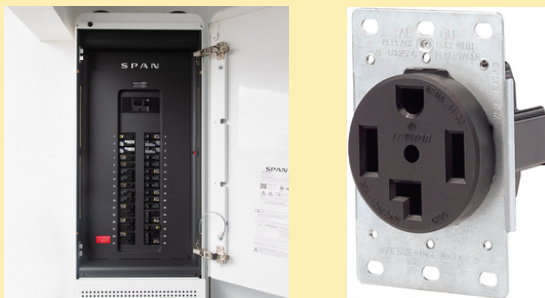
See all eligible vehicles at <https://fueleconomy.gov/feg/tax2023.shtml>



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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, 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 (1).



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 (1).

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Can this help with weatherization?

“Weatherization refers to a series of steps you can take to reduce the amount of energy required to heat and cool your home. Weatherization may involve air sealing, insulation, door and window upgrades, and ventilation improvements” (1). An energy audit is typically the first step! See our “Weatherization Assistance” pamphlet for more weatherization programs beyond the IRA!

Solar & Battery Storage

“Rooftop solar provides zero-carbon, no-cost electricity once it's installed and paid for” (1). See our “How to Go Solar” pamphlet for more information!

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!