



EVs, Electrification and the Inflation Reduction Act

EVERYTHING YOU NEED TO KNOW





The Inflation Reduction Act of 2022 (IRA), is historic in its breadth and depth

Passed in August 2022, it casts a wide net over inflation reduction with new sources of revenue from changes in the tax code, prescription drug pricing reform, increased IRS enforcement, and substantial investments in energy security and addressing climate change.



Notable for home and property owners are provisions that will substantially expand cost subsidies for [Electric Vehicles \(EV\) and related EV charging stations](#). The IRA is one of the key landmark bills, along with the [Bipartisan Infrastructure Law \(BIL\)](#) and the [CHIPS & Science Act](#), both of which have previously been passed by the U.S. Senate and House.

These bills, along with the IRA, will [generate over \\$2 trillion in revenue over the next two years](#) to improve the competitive technology position of the U.S. and advance clean energy progress.

The following guide will help you understand the IRA's energy-related provisions, how they benefit homeowners, and how EV owners and others can make the most of these new credits.



Why We Need the Inflation Reduction Act

**ELECTRIC
VEHICLE
CHARGING
ONLY**



Congress passed the Inflation Reduction Act of 2022 (IRA) to curb inflation and protect consumers from rising prices. The IRA is designed to increase economic growth, create jobs, reduce energy costs, and address climate change.

The IRA is a significant boon for EV owners and manufacturers who will benefit from the new subsidies available through this act.

The provisions of the IRA encourage investments in electric vehicle production facilities and will help reduce inflation in the long run.

Other reasons for this act include:

- Investments in infrastructure for electric vehicles and charging stations.
- Tax credits for new purchases of clean energy vehicles.
- Incentives to encourage the purchase of used electric cars.
- Grants to expand access to public transportation networks.

The IRA is a significant boon for EV owners and manufacturers who will benefit from the new subsidies available through this act.



Key Provisions of the IRA – Energy Security and Climate Change

The Inflation Reduction Act contains billions in tax incentives that aim to boost energy security and clean energy and reduce climate change.

Consumer Incentives

The IRA is providing \$394 billion to [incentivize the adoption of clean energy technologies](#) with a focus on EVs and advanced technology.

Additionally, \$43 billion of these tax credits are earmarked for consumers in a bid to lower greenhouse gas emissions. The intent is to make clean vehicles, energy-efficient appliances, rooftop-installed solar panels, home batteries, and geothermal heating devices more affordable to increase consumer purchases.

The IRA also provides significant inflation-indexed subsidies for EV charging infrastructure installation and grid connection to boost access and make EVs more accessible. This inflation indexing means these subsidies will rise in value over time, ensuring a more [comprehensive energy transition](#).

Credits for New and Used Clean Vehicles

Starting in 2023, qualifying EVs or fuel cell vehicles (FCVs) will be eligible for a tax credit [of up to \\$7,500](#) and [up to \\$4,000](#) for new and used cars, respectively.

The specifics may vary [based on the vehicle](#), but if you buy a qualifying EV and have a [Level 2 EV charging](#)

[stations](#) professionally installed by a licensed electrician, you may qualify for these credits.

Credits for Home Improvements

The Inflation Reduction Act also provides [a substantial tax credit for home improvements](#) that will help reduce greenhouse gas emissions and protect the environment.

The full credit, which began on Jan. 1, 2023, and continues through 2032, provides savings of up to 30% of the costs for eligible home improvement purchases made annually. That credit has a [yearly limit of up to \\$1,200](#).

That means consumers can utilize the tax credit for qualifying home improvement projects such as insulation and air sealing, roofing upgrades, energy-efficient windows, and doors, or solar energy systems year after year.

Biomass stoves and boilers, natural gas and electric heat pumps, and water heaters are eligible for an individual aggregate annual credit limit which is a maximum of \$2,000. You can combine that with the energy-efficient home improvement annual limit of \$1,200 to get total yearly credits totaling \$3,200.



Credits for Solar Systems

The IRA also provides a [30% tax credit for solar panel installations](#). The credit includes \$2,500 to rewire and up to 30% toward the purchase of smart electric panels. The 30% credit encompasses an array of expenses that include batteries, power cells, solar panels, power cells, permits, labor, and developer costs, among others.

While you no longer have to install solar to get the EV charger credit, if you do include solar, you can collect both the 30% charger credit and a 30% solar credit, as well as a \$2,500 credit for wiring changes you may need.

These credits make older home EV charger installations or upgrades more affordable for homeowners.

This incentive is available for both new and existing solar systems, so long as they are installed before the end of 2032. It also applies to both residential and commercial buildings so that everyone can benefit from this credit.

Homeowners who install residential solar panels can benefit from the solar tax credit. By combining the solar tax break with any additional IRA credits, they can enjoy significant savings and incentives for clean energy. Use this [calculator](#) to estimate your solar savings potential.

Additional Credits Available

In addition to the incentives mentioned above, the IRA also introduced new and expanded tax credits that are aimed at onshoring manufacturing in the U.S. Renewable energy equipment industries and EV manufacturers, battery projects, etc., whose products support the Biden administration's goal to address climate change, are all eligible for credits under the [Section 45X Advanced Manufacturing Tax Credit](#).

The Advanced Manufacturing Tax Credit

These credits will help reduce inflation while providing a boost to the U.S. economy by bringing more manufacturing jobs back home and helping to

cut inflation by lowering the cost of energy-efficient technologies.

Credits in the bill include an extensive list of components such as battery cells and modules, photovoltaic cells and wafers, blades, solar modules inverters, and more. This credit is available to makers of these components who produce them within the US and sell them to unaffiliated parties. [These credit rates vary by the type of component](#). Additionally, these rates are dependent upon factors such as the expense of production and specific capacities.

More credits are available if 100% of the steel or iron used in renewable energy equipment is made in the U.S. and 40% of all other components are made in America.

In addition to the component requirements discussed above, EV credits have other conditions they must meet to qualify for a credit. These include meeting minimum capacity factors, production costs, and cost-effectiveness. Additionally, it is essential to note that the eligibility of an EV for credit may vary depending on its make and model.

The Advanced Energy Project Investment Tax Credit

This credit provides additional incentives for investments in renewable energy projects such as solar, wind, geothermal, and energy storage systems. Investors may receive a federal credit of up to 30% of the total cost of an eligible project, with individual credits limited to \$1.8 million per taxpayer over six years.

Advanced Technology Vehicles Manufacturing (ATVM) Direct Loan Program

The Advanced Technology Vehicles Manufacturing (ATVM) Direct Loan Program provides loans to automakers to support new and existing advanced technology vehicle manufacturing facilities. These loans are offered with favorable terms and can help EV manufacturers fund new projects and expand their operations.



State, Local, and Other **Cost Incentives**

In addition to direct Federal incentives, the IRA established a state-administered initiative called the National Electric Vehicle Infrastructure (NEVI) Program.

State Incentives: The NEVI Program

The National Electric Vehicle Infrastructure (NEVI) Program provides additional cost incentives for electric vehicles and charging station installation.



With \$5 billion in funding, NEVI seeks to develop public EV charging and lower home EV charging station installation. Under Nevi, states can offer additional cost incentives, such as tax credits or subsidies, to help reduce the total cost of EV ownership.

Each of the 50 states has already applied for and received approval for their EV charging station networks. While the situation is still evolving, the majority of states [have incentives in place](#), as well as cities and [utilities](#).

In Colorado, for example, there is a state tax credit of \$2,000 on the purchase of EVs, a credit for [Excel Energy](#) utility customers of up to \$1,300 for related wiring costs, and a rebate for Excel customers of up to \$5,000 on an EV purchase.

If you would like to know more about the current incentives available in various states, you can go to the US Department of Energy's [Alternative Fuels Data Center webpage](#) for more information.

Note that some conditions associated with these incentives go beyond this article's scope. The crucial message here is that credits and rebates from various sources can add up to a substantial value but are constantly evolving.

Local Cost Incentives

In addition to state incentives, many cities and counties have programs that offer additional cost incentives for those owning or leasing an electric vehicle.



Here are a few examples:

- Special monthly parking rates: Cities like Sacramento, CA, are offering [special monthly parking rates](#) to EV owners. If you have a permit, you can get 50% off the monthly rate.
- Time-of-use rates: In Austin, Texas, Austin Energy offers a [time-of-use rate](#) that rewards customers for charging during the least expensive hours. This rate can reduce your electric bill significantly.
- Free use of HOV/HOT Lanes: In Atlanta, Georgia, EV owners with "alternative fuel vehicle" (AFV) license plates [are allowed single-person access](#) at no cost to many of the High Occupancy Vehicle (HOV) lanes and High Occupancy Toll (HOT) lanes of the HOV/HOT lanes in many metro areas. This benefit can save time and money for Atlanta



Northern California Rebates

In Northern California, the following rebates are available for EV owners.

Palo Alto Utilities Charger Rebates

The City of Palo Alto Utilities offers EV charger rebates for non-profits, schools, and mixed-use and multifamily properties. The rebate covers up to 75% of multifamily and mixed-use properties and 100% of electric vehicle supply equipment project installation costs for non-profits and schools.

Qualifying organizations in Palo Alto can additionally collect up to \$8,000 a charger for installing shared-use Level 2 charging stations. This rebate can go up to \$80,000 a service address for qualifying organizations.



SANTA CLARA

SMUD Rebate for Commercial and Residential Customers

Sacramento Municipal Utility District (SMUD) offers another hefty rebate to commercial customers that purchase and install Level 2 EV charging stations at their multi-unit dwellings or workplace. Eligible applicants may receive up to \$4,500 a port for a Level 2 EV charging station. Additionally, residential customers can benefit from additional incentives with the purchase and installation of a home-based EV charging station.



SACRAMENTO

Silicon Valley Clean Energy EV Rebate

Silicon Valley Power (SVP), a public power utility that serves Santa Clara, California, is committed to promoting sustainable transportation options for schools, community colleges, universities, and non-profits within its territory. To this end, SVP is offering EV charging station rebates to qualifying organizations looking to install Level 2 EV chargers.

Through the program, eligible organizations can receive rebates of up to \$5,000 per Level 2 charging port. This rebate can cover up to 100% of project installation costs, making it an attractive option for organizations looking to provide sustainable transportation options for their employees, students, and visitors.



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Other Incentives

Some companies are doing their part to incentivize their workers to purchase EVs. These benefits can include rebates for the purchase of a vehicle or allowing their EV-driving workers access to their company EV chargers. These types of incentives can vary by employer, so check with your company's HR department to find out what options are available.

In addition, financial institutions, such as Bank of America, are offering streamlined financing toward the purchase of electric cars and other EVs.



Succeeding in an Uncertain Environment

Succeeding in the EV charging station industry requires monitoring the ever-evolving landscape of incentives and regulations. It is critical to be able to quickly identify opportunities and capitalize on them.

It's also essential to use an experienced company with a long track record of successful projects who will remain up to date on all developments. Taking shortcuts or using cheap materials could prove costly in the long run, both in terms of time and money spent, as well as being a safety hazard.

By taking advantage of the inflation reduction act, NEVI program incentives, and local city initiatives, EV charging station projects can be successful despite the ever-changing environment. With an experienced, knowledgeable, and diligent team on board, property owners can rest assured their projects will be profitable in the long run.

To ensure success, keeping up with the most current incentives available and taking full advantage of them is essential. It is also important to have a team that understands the complexities of their industry and has a proven record of success. With the right team in place, EV charging station projects can succeed in even the most uncertain environments.



KEY TAKEAWAYS

Due to the Inflation Reduction Act and increasing consumer demand for alternatives to fossil fuels, incentives for electric vehicle purchasing and installation are growing. Federal, state, and local programs provide credits and rebates

that can add up to a significant amount of money toward your purchase and installation costs. Additionally, cities may offer free or discounted public parking fees when someone charges an EV in their designated lot.



Start Planning for Your EV Charging Station Today

When it comes to electrification, [Qmerit is the leading partner and installer](#) in North America for homeowners and business owners alike. We have successfully completed over 269,000 Level 2 charger installations, 18,500 battery storage installations, 53,000 solar system integrations, and 86,700 electrical panel upgrades across the country.

[Recognized by the White House](#) and highly trusted by top automakers and EVSE manufacturers, [utilities, fleets, businesses](#), and homeowners alike, our experienced electrification experts have a laser focus on experience, trust, and quality. We will work with you from start to finish to navigate and mitigate the risks.

We stay on top of current and developing technology, credits, and subsidies so that you do not have to spend hours or days digging for information.

Qmerit can help you learn more about how we can help you succeed in an ever-changing environment and take full advantage of the Inflation Reduction Act, NEVI program incentives, and local city initiatives.

- Get ahead of the game and get started planning for your EV charging station. [Contact us](#) today for more information.

