



One in 4 Americans wants to purchase an electric car, according to a recent survey.¹

There's no question that electric cars are on the rise -- for their sleek designs, for the money they save drivers over time, and for the crucial role they play in the fight against climate change.

Transportation is currently America's number one source of greenhouse gas emissions, and a zero-carbon future will require every car on the road to run on clean, renewable energy by 2050.^{2,3} Yet many people still have questions about whether electric vehicles (EVs) can fit their lifestyle.

[To help, we've answered some of the most frequently asked questions about EVs.](#)

What's the difference between an electric car and a hybrid?

Electric cars have zero tailpipe emissions and run solely on electricity. Hybrid cars have both an engine and a battery and can run on either electricity or gasoline.

How expensive are electric cars compared to fossil fuel-powered cars?

There are many options available between \$30,000 and \$40,000, and more affordable cars are on the way.⁴

In addition, EVs are usually cheaper to own over their lifetime than conventional vehicles because of their low fuel and maintenance costs. A 2020 Consumer Reports study found that over a year, charging an EV costs 60% less on average than filling a car with gasoline.⁵

There are also financial incentives available like the Federal Plug-In Electric Drive Vehicle Credit of up to \$7,500. Many states also have additional incentives to sweeten the deal. **[Learn more.](#)**

How far can an electric car travel on a single charge?

Some people are understandably concerned that EVs won't be able to take them where they need to go. But the rapid development of better and better EV technology in recent years can put many of these "range anxieties" at ease. As a result of battery improvements, the newest EV models have ranges upwards of 300 miles. Additionally, over 95% of car trips in the U.S. are less than 30 miles, which is easily serviced by an EV.⁶

[Read our guide for more information on EV charging and range.](#)

Where will I charge an electric car?

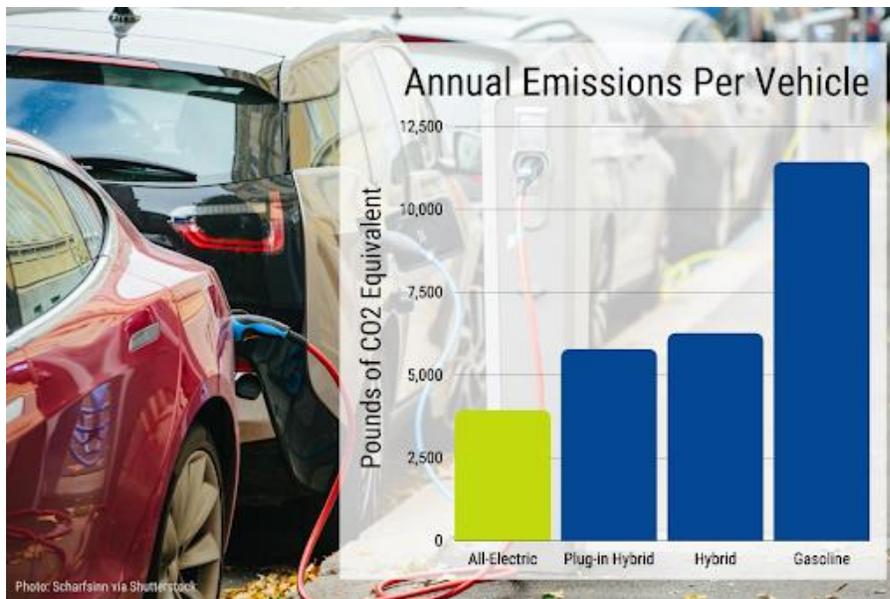
You've probably noticed that there are not nearly as many EV chargers as gas stations, and those without at-home charging options will need easy access to public ones. But the good news is that more charging stations are on the way.

Thanks to the bipartisan Infrastructure Investment & Jobs Act -- which Environment Massachusetts and our national network helped pass last fall -- America is investing \$7.5 billion to build a national network of electric vehicle charging stations, which will make it a lot easier to find a place to charge in the years to come.⁷

[Check out this interactive map to find public charging stations near you.](#)

What is the environmental impact of an electric car?

Compared to gas-powered cars, EVs use far less resources and materials. Because much of our electricity comes from non-renewable sources, EVs aren't fully carbon-neutral (yet). However, even when considering our current electricity mix, the average electric vehicle produces just a third of the greenhouse gas emissions that a gas-powered car does, and EVs will only get cleaner as we transition to more renewable energy.⁸



Of course, electric car battery manufacturing still relies on rare earth metals such as lithium and cobalt, and the harsh reality is that mining these materials is environmentally damaging. In the future, anticipated technological advancements are expected to reduce lithium and cobalt usage in batteries by up to 75%.

But in the meantime, limiting and reducing the environmental impact of mining must be an important consideration for EV manufacturers, and further research and development is needed for battery recycling and energy storage.⁹

[Want to learn more about electric vehicles? Visit our website.](#)

1. Khristopher J. Brooks, "[1 in 4 Americans say they want to purchase an electric car](#)," CBS, July 13, 2022.
2. "[Sources of Greenhouse Gas Emissions](#)," EPA, last accessed July 21, 2022.
3. Morgan Folger, "[Frequently Asked Questions: Electric Vehicles \(EVs\)](#)," Environment America, July 13, 2022.
4. Tim Levin, "[The 10 cheapest electric cars you can buy in 2022 from the Nissan Leaf to Ford F-150 Lightning](#)," Business Insider, June 13, 2022.
5. Chris Harto, "[Electric Vehicle Ownership Costs: Today's Electric Vehicles Offer Big Savings to Consumers](#)," Consumer Reports, October 2020.
6. "[Popular Vehicle Trips Statistics](#)," Federal Highway Administration, last accessed July 21, 2022.
7. Eve Lukens-Day, "[Charged up for an electric vehicle future](#)," Environment America, November 5, 2021.
8. "[Emissions from Electric Vehicles](#)," U.S. Department of Energy, last accessed July 21, 2022.
9. James Ellsmoor, "[Electric Vehicles Are Driving Demand For Lithium - With Environmental Consequences](#)," Forbes, June 10, 2019.