



Zero-Emission Cars

What You Need to Know



Did you know that getting more electric vehicles on the road is good for lung health? The American Lung Association’s [Boosting Health for Children](#) report found that if all new cars and trucks sold in the United States are zero-emission, and if we get our electricity from clean sources, the transition would prevent 2.79 million pediatric asthma attacks and save hundreds of infant lives by 2050. “Zero-emission” is an inclusive term that includes electric vehicles and all other non-polluting vehicles.

Why should people drive zero-emission cars?

- **Transitioning to zero-emission cars has huge health benefits across the board.** Gas-powered cars are a major source of air pollution and greenhouse gases that drive climate change. Tailpipe emissions contribute to asthma attacks, heart and lung damage, lung cancer, and premature death.
- **Zero-emission vehicles are better for the environment.** Over the course of their lifetimes, electric vehicles – EVs – generate less than half of the greenhouse gas emissions of comparable gasoline-powered vehicles. This comparison accounts for all the resources used to make the vehicle and the battery, and the electricity used to power the vehicle. And environmental benefits of EVs will continue to grow since electricity in the U.S. keeps getting cleaner. Additionally, the market for the direct reuse of batteries is rapidly growing, and batteries can also be recycled for their raw materials.
- **Everyone stands to benefit from the transition to zero-emission vehicles, especially communities most impacted by traffic pollution,** which are disproportionately communities of color and low-income communities.



- **EVs maintenance is easier and less expensive.**

Electric cars are proving to be more reliable than gas-powered vehicles. A gas-powered car's engine has many different moving parts, while an electric car has an electric motor with far fewer moving parts. Fewer moving parts means fewer opportunities for things to break down and need repair. A 2020 study found that EV drivers pay about half of what drivers of gas-powered vehicles pay for maintenance and repairs.

- **Zero-emission vehicles are increasingly affordable.**

The costs of zero-emission passenger vehicles are coming down, and tax credits are now available for buying used EVs as well as new ones. Recent research shows that owning an electric car can save \$12,000 over the lifetime of the vehicle when compared with a gas car, due to lower fuel and maintenance costs. Beyond buying an EV, families can benefit from the transition to electric transportation through programs that can support replacement of older vehicles with cleaner vehicles and electric vehicle car share.



- **EVs can actually support electric grid stability** by acting as backup power storage on wheels. If EVs have vehicle-to-grid or vehicle-to-home capabilities they can also store energy for use at a later time and even send power back during high demand times. And because EVs are usually only used for a small fraction of each day, they can often be charged when renewable energy on the grid is abundant and cheaper.

- **EVs are a great choice no matter the weather.** For both EVs and gasoline-powered vehicles, driving in cold temperatures uses more energy to power the vehicle and to warm the cabin. With more energy used, this naturally lowers driving range for both types of vehicles. However, just like with gasoline-powered cars, a little extra planning during winter months will limit the impact on an individual's EV driving experience.

- **EV range is more than enough for typical daily use.** EVs have the range to cover a typical household's daily travel - approximately 50 miles per day. Most EVs go above 200 miles on a full charge, and automakers have announced plans to release even more long-range models in the coming years.

- **Charging doesn't need to be stressful.** Many people can meet their charging needs by plugging in only at home. For those who live in apartments or condominiums, EV charging stations are becoming a more common building amenity. Access to EV charging will increase significantly in the coming years as a result of new initiatives to build out a national network of electric vehicle chargers along highways, and in communities and neighborhoods.

To learn more about the American Lung Association's work on promoting the transition to zero-emission vehicles, visit [Lung.org/ev](https://www.lung.org/ev).