

Charge Ready NY 2.0

Benefits of Electric Vehicles



Drive clean, save money, and reduce pollution

Cost Savings

Electric vehicles (EVs) are already cheaper than internal combustion engine (ICE) vehicles: Despite common misperceptions, most EVs are already cheaper to own than comparable ICE vehicles, as shown by total cost of ownership (TCO) analyses. TCO analyses incorporate the initial purchase price of a vehicle, the maintenance and fuel costs throughout the vehicle's lifetime, depreciation of value, and (unique to EVs) available tax credits. Even without the \$7,500 federal tax credit (and additional State and utility tax credits and incentives), TCO analyses consistently show EVs to be the more affordable option.

EVs are getting cheaper by the day: EV and battery technology are progressing very fast, driving EV prices steadily downward. The battery is the most expensive component of all EVs, and according to the Department of Energy, battery prices have dropped nearly 90% between 2008 and 2023.

Public Health Benefits

Unlike ICE vehicles, EVs produce zero tailpipe emissions. Tailpipe emissions, which emit toxic gases and small particles, contribute to climate change on a global scale and can cause a wide range of health issues for people breathing them in. According to a report recently released by the American Lung Association, a full transition to EVs could create \$978 billion in health benefits by 2050, including avoiding 89,000 premature deaths, 2.2 million asthma attacks, and 10.7 million lost workdays. One in three Americans currently lives in an area with dangerous levels of air pollution, with the burden falling on people from disadvantaged communities. EVs also produce less noise on top of decreased air pollution.



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Environmental Benefits

EVs are indisputably better for the environment than gas-powered vehicles. Even when the vehicles are charged with electricity that has been generated by fossil fuels, EVs are far more efficient than ICE vehicles (current EV models are approximately 4x more efficient on average than equivalent ICE vehicles.) Additionally, with zero tailpipe emissions, an EV powered by renewables has the potential to be completely emission-free — an impossibility for ICE vehicles. A 2022 study concluded that the total life-cycle emissions of hybrid and electric vehicles are reduced by up to 89% compared to ICE vehicles.

National Security

Although national security is one of the lesser-known benefits of electric vehicles, the benefit must not be underestimated. Dependence on a steady supply of foreign oil has already been a motivating factor in several armed conflicts, which have cost countless lives and caused tremendous economic burdens. Still, despite the massive number of resources and lives invested in maintaining our oil supply, America remains incredibly vulnerable to future supply disruptions, such as those caused by the war between Russia and Ukraine. According to the U.S. Energy Information Administration, in 2022, transportation accounted for 66.6% of U.S. petroleum consumption. A switch to EVs would dramatically reduce national dependence on foreign oil, bolstering a critical component of our national security.

Driver Experience

The personal benefits of owning and driving an EV are not limited to cost savings. Numerous quality-of-life improvements come with the switch from ICE vehicles, such as faster acceleration, a quieter driving experience, tighter turning, not having to worry about exhaust fumes, and fewer trips to refuel due to easy access to charging at home/work. According to Plug-In America's 2022 EV driver survey, 90% of EV owners are very satisfied with their vehicles and indicated that they are either likely or very likely to purchase an EV for their next car. Additionally, over 80% of drivers selected "satisfactory" or "exceptional" in every category when asked to describe their EV's range, charging speed, performance, safety features, comfort, styling and appearance, navigation system, ease of charging, and cargo space reliability.

Ready to get started?

For more information, please contact the Electrification Coalition Charge Ready NY 2.0 Team at chargereadyny@electrificationcoalition.org.

