

Why Electric Vehicles?

The benefits of an electric transportation future are significant. Widespread adoption of EVs is the best scalable strategy to loosen oil's monopoly on our transportation sector and strengthen U.S. national security. Electric vehicles (EVs) also offer cost savings for consumers and fleet operators, economic development opportunities, and new jobs in the auto, technology, and innovation sectors. Due to their bi-directional charging capabilities, EVs can serve as alternative power sources, making the electrical grid more resilient and secure.



U.S. National Security

The transportation sector alone accounts for the largest share of <u>U.S. petroleum consumption at 66.6%</u> in 2022. Our military spends \$81 billion annually defending our oil markets. More than 50 percent of daily oil supplies travel through seven major chokepoints in often unstable regions, particularly the Middle East.

The U.S.'s oil dependence threatens national security and undermines our ability to conduct effective foreign policy. The global shift to EVs offers our nation the best opportunity to break our addiction to oil and swap this volatile global commodity for stable, domestically produced electricity.



Cost Savings

EVs offer cost savings not only for consumers but also for private and public fleets. EVs are significantly cheaper to fuel than their internal combustion engine counterparts, due to their efficiency and the fact that electricity is less expensive and more stably priced than gasoline. EVs also have fewer moving parts, requiring less maintenance and saving owners and operators money over time.

A recent <u>report</u> from the Electrification Coalition and Advanced Energy United found that Florida could save \$277 million by considering the total cost of ownership (TCO) in vehicle procurement decisions, compared to the current practice of only considering the purchase price. The report further highlights the lower lifetime maintenance costs that ultimately make an electric fleet significantly more affordable for the state.



Jobs and Economic Development

The past eight years have seen significant private investments in EV, battery, and battery component manufacturing. Over \$120 billion in private investment has been announced, resulting in 143,000 new jobs.

These economic development opportunities and job creation are expected to accelerate in the coming years, thanks to federal funding for EVs, an increase in consumer demand, and technological advancements in EV design and capabilities.

Florida is the leader in EV registrations in the Southeast and second nationwide with over 203,000 on the road and almost 2,700 public access EV charging stations. The growing electric transportation industry in Florida would increase gross state product, employment, real house income, state revenue, and ultimately, national security.

Energy Security and Resilience

When equipped with bi-directional charging capabilities, EVs can send power back to the electric grid in times of need, maintaining the operation of disaster shelters, community centers, medical facilities, emergency services, and more. Widespread deployment of EVs, especially electric school buses and other medium- and heavy-duty vehicles, can also help prevent blackouts and brownouts by shifting the power supply from low-demand to high-demand periods.

Although bi-directional technology is not yet widely adopted, the Department of Defense is investing in its potential with an initiative to test between 100 and 500 EVs in bidirectional applications at military bases.

Florida is vulnerable to impacts from tropical storms and hurricanes, with 18 named storms in 2019 and the recent devastation from Hurricane Ian in September 2022. It is essential to consider the benefits of EVs and infrastructure as a source of resiliency when major weather events threaten the sunshine state.

The Path Forward

There is currently unprecedented momentum behind the transition to electric vehicles. Still, it is crucial that lawmakers pass supportive policies at the state level to ensure the U.S. does not fall behind other countries in reaching its electric transportation future. To learn more about those policy opportunities, visit <u>electrificationcoalition.org</u> or reach out to our Florida state lead, Celia Kosinski, at <u>ckosinski@electrificationcoalition.org</u>



About the Electrification Coalition

The Electrification Coalition is a nonpartisan, nonprofit organization that advances policies and actions to facilitate widespread deployment and adoption of electric vehicles in order to reduce the economic, public health and national security risks caused by America's dependence on oil. For more information, visit <u>electrificationcoalition.org</u>.