



**ZERO EMISSION
TRANSPORTATION
ASSOCIATION**

**Statement for the Record submitted by the Zero Emission Transportation Association
(ZETA)**

**House Committee on Energy and Commerce, Subcommittee on Energy Hearing on
Charging Forward: Securing American Manufacturing and Our EV Future
held on March 8, 2022**

Submitted: March 7, 2022

Dear Chairman Rush and Ranking Member Upton:

The Zero Emission Transportation Association (ZETA) is an industry coalition of over 60 member companies advocating for 100% electric vehicle (EV) sales by 2030. These policies will help restore American leadership in automotive manufacturing, create hundreds of thousands of high-paying jobs, and drive public health benefits. As a leading organization representing the entire EV supply chain, we recognize the enormous opportunity policymakers have to help electrify the transportation sector. ZETA is dedicated to ensuring that American workers and consumers benefit from growing EV adoption. And while there are clear benefits of expanded economic development and EV consumer savings at a time of record high gas prices, the public benefits of transportation electrification accrue to everyone - even those who may not work in the sector or ever get behind the wheel of an EV. By reducing emissions we have the opportunity to not only limit the impacts of climate change, but to also drive down the tailpipe pollution that dramatically impacts public health.

Job Growth Potential of the Electric Vehicle Sector

The bipartisan Investment Infrastructure and Jobs Act (IIJA) allocates \$7.5 billion for a publicly-accessible, national EV charging network. The National Electric Vehicle Infrastructure (NEVI) Formula Program is designed to guide the distribution of \$5 billion of these funds. The build-out of 500,000 chargers through NEVI grants has the potential to create 60,000 new jobs, and the ongoing maintenance and upgrades to charging stations will ensure additional long-term employment.¹ Not only will electrification yield much-needed emissions reductions, it will also create domestic manufacturing jobs and stimulate economic growth. The U.S. is facing an unprecedented opportunity to lead the global shift to EVs, and having the proper implementation guidance in place will ensure that the EV transition benefits all Americans.

Opportunities for domestic job creation exist throughout the EV charger supply chain—from manufacturing to maintenance—and building new charging infrastructure is expected to be a primary driver of these new employment opportunities. Charger buildout and installation will create tens of thousands of jobs among urban planners, manufacturers, electricians, engineers, and other technicians.² Manufacturing and installing charging points alone can create up to twelve jobs per million dollars of investment, which is more jobs per dollar than traditional auto

¹ <https://www.iea.org/reports/sustainable-recovery/transport>

² https://www.bls.gov/green/electric_vehicles/electric_vehicles.pdf

manufacturing and highway maintenance.³ With appropriate government investment, the EV industry can create over two million jobs in the United States in the coming decades.⁴

As the EV industry prepares for further charging installation, workforce development plans may include funding for programs that bolster the training and capability of the local workforce to install and service EV charging infrastructure. Skilled tradespeople, including electricians, play a key role in EV charger installation and maintenance, but their work alone is not sufficient to ensure an adequately serviced charging network. EV chargers include software and mechanical components that require specialized knowledge to service, some of which can be diagnosed and fixed remotely. With these technical requirements in mind, workforce development efforts should focus on creating new opportunities for both tradespeople and for those seeking careers in clean transportation which do not require trade licenses or years of industry experience, since those requirements can be a barrier to entry.

Opportunities to Further Expand the National EV Charging Network

The IIJA provides a historic down payment on the creation of a national EV charging network. It will ensure that EV drivers will not have to worry about their vehicles' range on longer trips, and it will address market externalities by deploying EV chargers in public or less commercially viable locations. But further action must be taken to deploy EV chargers in a manner that will allow drivers to easily charge while the vehicle is not in use.

Congress should expand the 30C Alternative Fuel Infrastructure Tax Credit, which will facilitate EV charger deployment on commercial properties. In 2019, Congress passed an extension of the EV charging tax credit—originally enacted in 2005 in the Energy Tax Incentives Act—which covers 30% of the cost for installing residential or workplace charging infrastructure. The 30C tax incentive gives qualifying businesses a 30% tax credit (up to \$30,000) for all alternative fuel infrastructure installed. We encourage Congress to now bolster that tax incentive by replacing its current \$30,000 cap per location with a \$200,000 cap per charger. This will significantly drive the buildout of charging infrastructure and improve consumer access—and it will drive demand for charger manufacturing. Expanding the 30C tax incentive will help business owners to install charging infrastructure in their parking lots, which will allow drivers to charge their vehicles while fulfilling their daily routines. This will allow charging to become an easy, passive “background” activity that drivers can accomplish while going about their day, rather than having to take an independent trip—which is similar to how gas-powered vehicle drivers refuel their vehicles.

Economic Benefits of EV Ownership

Charging installation is not enough to bolster a successful EV industry. As the early adopter phase of EV sales begins to transition more universally to more consumers, the impact of incentives holds even more importance. Consumers who choose to purchase EVs because they want to save money over the life of the vehicle, rather than be first to try a new technology, are much more likely to respond to incentives like tax credits. EVs offer \$6,000 to \$10,000 in lifetime savings over comparable gas-powered vehicles, even though the EVs may now have

³ <https://www.iea.org/reports/sustainable-recovery/transport>

⁴ https://energyinnovation.org/wp-content/uploads/2021/04/Energy-Innovation_2035-2.0-Accelerating-Clean-Transportation-Policy-Report.pdf

higher retail prices.⁵ These savings are accrued through an up-to-50% reduction in maintenance and operating costs.⁶ In rural areas, the total cost of ownership benefits will be even greater due to their generally higher mileage, lower fuel efficient vehicles, and added use-cases for work and recreation.⁷ It is also critical to note that EV operating costs are not dependent on foreign oil disruption, which are subject to price shocks, instability, and supply shortages. Rather, EVs run on electricity, which is cheaper than gasoline and is sourced domestically from increasingly renewable and local resources.

As more EVs enter the used-vehicle market, they will become more affordable for buyers further down the income scale. But in order to sell affordable used EVs, we must first sell new EVs; facilitating these sales will require support in the form of incentives and infrastructure. Income-based and first-adopter criticisms leveraged against EVs result from market realities: as is true with all new technologies, EVs are part of an ascendant market that is almost entirely made up of new car purchases, which on their own typically attract more affluent customers. Consumer incentives policies, such as expanding section 30D of the U.S. tax code, will help deploy more EVs into the market and will therefore accelerate the rate at which EVs turn over into the secondary sales market, which will allow for affordable EV sales to all Americans.

Battery Manufacturing and Critical Minerals

As the U.S. continues to explore opportunities to maintain its leadership in the global supply chain, federal policymakers must look into investments surrounding critical minerals and EV battery manufacturing. By securing our supply chain for critical minerals, we will create good-paying jobs and reduce our dependence on foreign economies. Certain critical minerals such as lithium, cobalt, and graphite all heavily impact domestic battery production. The United States has 7.9 million metric tons of lithium content resources, which is the world's fourth-largest identified lithium supply—or, 9.2% of the world's total lithium resources.⁸ For other critical minerals such as cobalt and graphite, the U.S. must invest in global trade policies that meet the ongoing demand of critical mineral extraction and processing.

It's also important to note that modern battery recycling techniques can reclaim up to 95% of the critical minerals in expired batteries in a commercially competitive way. Recycling companies like American Battery Technology Company (ABTC),⁹ Li-Cycle,¹⁰ and Redwood Materials¹¹ process critical minerals from used batteries and so they can be repurposed in the domestic manufacturing of new EV batteries.

Ensuring an Equitable Transition to Electrified Transportation

When state transit planners consider equitable transportation, ZETA recommends that they publicize the steps they have taken to ensure that underserved communities are served by EV

⁵ <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf>

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https://advocacy.consumerreports.org/press_release/electric-vehicle-owners-spending-half-as-much-on-maintenance-compared-to-gas-powered-vehicle-owners-finds-new-cr-analysis/

⁷ <https://www.consumerreports.org/hybrids-evs/evs-offer-big-savings-over-traditional-gas-powered-cars/>

⁸ <https://pubs.usgs.gov/periodicals/mcs2021/mcs2021-lithium.pdf>

⁹ <https://americanbatterytechnology.com/plant-updates/>

¹⁰ <https://www.madeinalabama.com/2021/09/canadas-li-cycle-plans-ev-battery-recycling-facility-in-alabama/>

¹¹ <https://www.redwoodmaterials.com/press/redwood-materials-and-ford-motor-company-announce-strategic-relationship>

charging infrastructure buildout. In historically underserved urban communities, exposure to pollution that is emitted from major traffic corridors has yielded drastic health consequences. Frontline communities experience greater-than-average emissions exposure and the disparity is generally held across urban and rural areas, and it occurs for people at all income levels.¹² When looking at equitable distribution of charging infrastructure, industry and government should evaluate population density and strategic placement of public charging stations within close proximity of multi-unit dwellings (MUDs) that lack adequate space or resources to host charging infrastructure. Expanded charging for these residents will also ensure that rideshare drivers, many of whom live in multi-unit dwellings, will be able to transition to electric vehicles and deliver substantial public benefits.¹³

We commend the subcommittee for their commitment to vehicle electrification and economic development in the U.S. The shift to EVs can substantially improve the country's public and environmental health through emissions reduction while securing a robust domestic supply chain. ZETA encourages passage of comprehensive legislation to expand or update existing incentives for domestic manufacturing in the EV industry; this will be a crucial step towards incentivizing consumer adoption and reaching our goal of 100% electric vehicle sales by 2030.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'JB', with a stylized flourish at the end.

Joseph Britton
Executive Director
Zero Emission Transportation Association (ZETA)
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Washington, DC 20003

¹² <https://www.epa.gov/sciencematters/study-finds-exposure-air-pollution-higher-people-color-regardless-region-or-income>

¹³ <https://doi.org/10.1038/s41560-020-0632-7>