

Truck and Bus Electrification Investments

Congress has recently advanced two major pieces of legislation that contain significant investments to advance the electrification of trucks and buses. Combined, these pieces of legislation will help accelerate the adoption of electric trucks and buses by making the vehicles and associated infrastructure more affordable and accessible. This historic investment will also deliver local air quality benefits while decarbonizing the transportation sector – the nation’s largest source of climate pollution.

Infrastructure Investment and Jobs Act (IIJA) – *signed into law by President Biden*

- **\$5 billion for Low-Carbon and Zero-Emission School Buses:** \$5 billion is allocated to help state and local governments, eligible contractors, and nonprofit school transportation associations adopt low-carbon and zero-emission school buses. \$2.5 billion is designated specifically for zero-emission buses, and another \$2.5 billion is for low-carbon emissions buses (which zero-emission buses can compete for).
- **\$7.5 billion for Electric Vehicle Charging:** \$7.5 billion is allocated to build out a national network of electric vehicle charging stations. Eligible grant applicants include state and local governments, transit authorities, and tribes. This funding includes the National Electric Vehicle Formula Program, which will provide states with \$5 billion to strategically deploy electric vehicle charging infrastructure over 5 years. An additional \$2.5 billion will go towards alternative fueling infrastructure, including electric vehicle charging, through the Highway Trust Fund.
- **\$5.25 billion for Low/No program:** \$5.25 billion is allocated for funding zero/low emission transit buses through the Low or No Emission Vehicle (“Low-No Bus”) program (this program almost always funds electric transit buses).
- **\$400 million for reduction of truck emissions at ports:** This Department of Transportation funding would establish a competitive grant program to reduce port-related emissions from idling trucks. The legislation also includes a study on how ports benefit from electrification and emerging technology to reduce truck emissions.
- **\$2.25 billion to fund the Port Infrastructure Development Program:** This Department of Transportation funding can be used to reduce or eliminate pollutants and greenhouse gas emissions at ports, as well as installing electric vehicle/alternative refueling infrastructure.
- **Expansion of the Advanced Technology Vehicles Manufacturing Program (ATVM):** The legislation expands the ATVM Program within the Department of Energy’s Loan Program Office to include medium and heavy-duty vehicles and off-road vehicles, including maritime technology.
- **\$6 billion for Battery Processing and Manufacturing:** This grant program provides funding to expand the processing and manufacturing of advanced batteries (including for electric vehicles and the electric grid) in the U.S. There are battery material processing grants that go to demonstration projects, construction of facilities and retooling/retrofitting/expanding facilities for battery manufacturing and recycling.
- **\$10 million for a lithium-ion battery recycling prize competition:** This provides funds for the Energy Secretary to provide prize money for competition winners.
- **\$60 million for Battery Recycling Research, Development, and Demonstration Grants:** The Energy Secretary, in coordination with the EPA Administrator, shall award multi-year grants to eligible entities for research, development, and demonstration projects to create innovative and practical approaches to increase the reuse and recycling of batteries.

- **\$3 billion for Deployment of Technologies to Enhance Grid Flexibility:** This includes the ability to facilitate the aggregation or integration of distributed energy resources to serve as assets for the grid; provide energy storage to meet fluctuating electricity demand, provide voltage support, and integrate intermittent generation sources, including vehicle-to-grid technologies; facilitate the integration of renewable energy resources, electric vehicle charging infrastructure, and vehicle-to-grid technologies; and reliably meet increased demand from electric vehicles and the electrification of appliances and other sectors.

Build Back Better Act (BBBA) – passed the House, awaiting Senate passage

Tax credits:

- **Tax Credit for Commercial Zero-Emission Vehicles:** A new 45Y tax credit for commercial electric vehicles is established, covering up to 30% of the cost of the vehicle, or the incremental cost compared to a similar internal combustion engine vehicle.
- **Tax Credit for Alternative Fuel Vehicle Refueling Property:** The 30C Alternative Fuel Vehicle Refueling Property Credit is extended and expanded to an uncapped 20% investment tax credit after the first \$100,000 in investment (the initial \$100,000 invested receives a 30% tax credit).
- **Tax Credit for Manufacturing Investment:** The 48C Tax Credit, which reduces the cost of developing new facilities to produce clean energy technologies and vehicles, is expanded to include medium and heavy-duty zero-emission vehicles.

Grant programs:

- **\$5 billion for a Clean Heavy Duty Vehicles Program:** A new \$5 billion program at the EPA is established to electrify class 6 and 7 vehicles, with \$2 billion designated specifically for nonattainment areas. Funding can go towards the replacement of vehicles, infrastructure, and workforce development/training.
- **Nearly \$9 billion for Federal Fleet Electrification:** The bill provides nearly \$6 billion to acquire electric vehicles and support infrastructure for the United States Postal Service, and it provides nearly \$3 billion for the procurement of electric vehicles and support infrastructure for the General Services Administration.
- **\$3.5 billion to reduce air pollution at ports:** This funding can be used to purchase zero-emission port equipment and technology through the EPA.
- **\$60 million to reduce diesel emissions:** This EPA funding can be used to reduce emissions resulting from goods movement facilities, and vehicles servicing goods movement facilities, in low-income and disadvantaged communities to address the health impacts of such emissions on such communities.
- **\$10 billion for a new Affordable Housing Access Program:** A new program at HUD is established for grants that include a corridor-based bus rapid transit project that utilizes zero-emission vehicles, as well as the acquisition of zero-emission vehicles and related infrastructure.
- **\$4 billion for Neighborhood Access and Equity Grant Program:** This funding includes reducing surface transportation-related air pollution, DACs, and tech assistance.
- **\$2 billion for electric vehicle charging infrastructure:** This funding is for state, local, and nonprofit efforts to install zero-emission vehicle charging or fueling infrastructure and is part of the EPA's Greenhouse Gas Reduction Fund.
- **\$1 billion for Zero-Emission Infrastructure grants:** This funding includes \$600 million for publicly accessible Level 2 electric vehicle service equipment, \$200 million for publicly accessible networked DC fast chargers and electric vehicle charging stations, and \$200 million for hydrogen fueling stations. The funding is targeted for rural communities and underserved or disadvantaged communities.
- **\$3.5 billion for Domestic Manufacturing Conversion Grants:** Grants relating to domestic production of plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles.