

# FACT SHEET: Clean Vehicle Provisions in the Inflation Reduction Act

In the United States, the transportation sector represents the single largest source of climate-warming greenhouse gas emissions, surpassing industrial emissions and emissions from energy generation, residential and commercial buildings, and the agricultural sector.<sup>1</sup> **While reducing emissions from vehicles cannot be the only strategy we pursue in our efforts to decarbonize our mobility systems, we will not meet our climate goals without a significant transition to cleaner cars, buses, and trucks.**

That's why we are celebrating the clean vehicle policies and programs established and funded in the Inflation Reduction Act, which applies a whole-of-government approach to addressing this source of greenhouse gas and health-harming emissions, while also creating and preserving good union jobs, supporting and growing a domestic supply chain for vehicle components and technologies, and improving mobility and air quality in our neighborhoods. This historic legislation contains clean vehicle tax credits for new and used car buyers—as well as commercial fleets—and puts ambitious-but-achievable requirements on qualifying vehicles' critical mineral and battery supply chains. It brings those supply chain requirements within reach for car and light-duty truck manufacturers—who have already made significant commitments to onshoring their battery supply chains—through major investments in the domestic auto manufacturing supply chain.<sup>2</sup> Finally, it provides direct grants to a range of heavy-duty fleets to replace their existing vehicles—including transit and school buses, logistics trucks, drayage vehicles, and United States Postal Service delivery vans—with zero emission alternatives.

This fact sheet will highlight key clean vehicle provisions in the Inflation Reduction Act, elaborate upon their impacts for workers, and lay out the work that remains to build truly clean, just, safe, and accessible mobility systems.

## CLEAN VEHICLE PROVISIONS IN THE INFLATION REDUCTION ACT

The clean vehicle provisions in the Inflation Reduction Act can be divided into three main categories: tax credits, grants and loans for clean vehicle manufacturers, and grants for heavy-duty fleet electrification. Each of these provisions is described in detail, along with projected employment impacts, in Figure 1.

### Tax Credits

The Inflation Reduction Act establishes and updates several critical tax credits that will speed the deployment of electric vehicles (EVs) and fuel cell vehicles by bringing down the price of these technologies to be cost competitive with internal

combustion engine (ICE) alternatives in the immediate and long terms. The most significant of these updates is the Clean Vehicle Credit (30D), which lowers the purchase cost of qualifying battery and fuel cell EVs by up to \$7,500 (see Figure 2 for further details). There is also a Previously Owned Clean Vehicle Credit (25E), which will support a secondary market for clean vehicles, and ensure that the majority of consumers who shop for used cars every year also have access to the total cost of ownership savings that come from EV ownership.<sup>3,4</sup>

A Commercial Clean Vehicle Credit (45W) aids fleets to purchase clean light- and heavy-duty vehicles by defraying the incremental upfront cost of purchasing a clean vehicle vs. an ICE alternative—an essential provision for communities disproportionately impacted by the local air pollutants emitted by diesel-fueled trucks, delivery vans, and work trucks.

Finally, the Alternative Fueling Property Credit helps individuals and businesses install EV charging and alternative fueling equipment to supplement the significant investments made by the Bipartisan Infrastructure Law in a nationwide EV charging network. All of these tax credits make clean vehicles and infrastructure the easy, more affordable choice as drivers and commercial entities plan their car purchases and fleet investments.

### **Manufacturing Investments**

The Inflation Reduction Act will move us forward on building the next generation of vehicles and components here in the United States. The bill funds two key programs at the Department of Energy (DOE) that will speed the transition to clean vehicles and grow the domestic supply chain for these vehicles: the Advanced Technology Vehicle Manufacturing (ATVM) Loan Program, and the Domestic Manufacturing Conversion Grant Program. These programs, in addition to the bill's tax credits for battery manufacturing, will also help manufacturers satisfy the critical mineral and battery content requirements that would make their models eligible for the full \$7,500 Clean Vehicle Credit.

The ATVM is a longstanding and successful program that disburses loans to manufacturing facilities building advanced technology vehicles, such as those incentivized by the Clean Vehicle Tax Credit. The ATVM has a proven record of creating and protecting good auto manufacturing jobs here in the U.S., and was recently expanded in scope to support the disbursement of loans to facilities building an even broader range of technologies, including medium- and heavy-duty vehicles and their components, airplanes, maritime vessels, and rail. The Inflation Reduction Act provides an additional \$3 billion for the ATVM, which will unlock billions of dollars in private capital, building the technology we need to achieve climate goals and reduce emissions from all transportation sectors—from light-duty cars to airplanes.

The Domestic Manufacturing Conversion Grants Program also supports the auto manufacturing sector, but is targeted to provide direct grants to recently closed or at-risk facilities. The Inflation Reduction Act provides \$2 billion for this program, which will fund the retooling efforts needed to transform production lines that were building ICE vehicles and their parts, into production lines building the clean vehicles of the future. Both of these investments provide manufacturers with the immediate financial

support they need to meet the ambitious labor, critical minerals, and battery component requirements laid out by the Clean Vehicle Credit, and other federal and state incentives for clean vehicles.

### **Medium- & Heavy-Duty Fleet Electrification**

The Inflation Reduction Act also takes significant strides to replace gasoline- and diesel-powered medium- and heavy-duty vehicles with cleaner alternatives. These provisions are highly consistent with the Biden administration's emphasis on improving local air quality in disadvantaged communities—such as those near ports and highways that are disproportionately burdened by air pollution from transportation.<sup>5</sup> The IRA allocates \$7 billion through several programs to reduce local air pollutants, and climate-warming greenhouse gas emissions, from medium- and heavy-duty vehicles. It takes an expansive approach to heavy-duty vehicle decarbonization and, \$1 billion in grants to the Environmental Protection Agency (EPA) to encourage the private sector to electrify Class 6 and 7 trucks, and \$3 billion to EPA to reduce emissions from ports, including through the purchase and deployment of zero emission drayage vehicles. Reducing heavy-duty vehicle emissions is not only a priority for improving air quality and health in disadvantaged communities; it is also essential for the workers who work in and on these vehicles. The bill also allocates \$3 billion to electrify the United States Postal Service (USPS) delivery fleet. The \$7 billion for medium- and heavy-duty vehicle electrification will make a difference for the USPS drivers, logistics truck drivers, school and transit bus drivers, and port and warehouse workers, all of whom spend every single day breathing in exhaust from the vehicles that constitute their workplaces.

The sum total of the vehicle-related tax credits, manufacturing investments, and heavy-duty fleet electrification highlighted in Figure 1 is a significant leap forward toward a cleaner nationwide transportation system that works to address climate change, reduce economic inequality, and improve mobility for all.

**Figure 1. Clean Vehicle Provisions in the Inflation Reduction Act<sup>6</sup>**

Tax Credits		
<b>Clean Vehicle Credit (30D)</b> Section 13401	Up to \$7,500 consumer tax credit for drivers purchasing new qualifying clean vehicles ( $\geq 7\text{kWh}$ ). See Figure 2 for further details.	120,000 jobs over 10 years
<b>Credit for Previously Owned Clean Vehicles (25E)</b> Section 13402	Up to \$4,000 consumer tax credit for drivers purchasing used clean vehicles ( $\geq 7\text{kWh}$ ).	21,000 jobs over 10 years
<b>Credit for Qualified Commercial Clean Vehicles (45W)</b> Section 13403	Up to \$7,500 tax credit to defray up to 30 percent of the incremental cost of replacing diesel- or gas-powered commercial vehicles under 14,000 lbs with full EVs (cars, pick-up trucks, utility vans), and up to \$40,000 tax credit to defray up to 30 percent of the incremental cost for commercial vehicles over 14,000 lbs with full EVs (larger vans, buses, refuse trucks, long haul trucks). Up to 15 percent credit for the replacement of qualifying vehicles with cleaner, but non-EV, alternatives.	87,000 jobs over 10 years
<b>Alternative Fueling Property Credit (30C)</b> Section 13404	Up to \$100,000 (or 6 percent of cost) for the installation of alternative fueling infrastructure at non-private residences, including EV chargers and hydrogen, ethanol, natural gas, compressed natural gas (CNG), liquified natural gas (LNG), liquified petroleum gas (LPG), and biodiesel fueling infrastructure. 5x credit (or 30 percent) is awarded to projects meeting prevailing wage and apprenticeship hour requirements. Credits are restricted to properties in low income and rural areas.	33,000 jobs over 10 years
Manufacturing Investments		
<b>Advanced Technology Vehicle Manufacturing (ATVM) Loan Program</b> Section 50142	\$3 billion to the DOE Loan Programs Office (LPO) to provide direct loans for re-equipping, expanding or establishing manufacturing facilities making low- or no-emission vehicles and their components, including light, medium-, and heavy duty vehicles; trains; maritime vessels; aircraft; and hyperloop technology.	47,000 jobs over 10 years
<b>Domestic Manufacturing Conversion Grant Program</b> Section 50143	\$2 billion to the DOE Advanced Manufacturing Office to provide grants to outfit at-risk or recently closed domestic auto manufacturing facilities to produce electric, hybrid, plug-in hybrid, and fuel cell electric vehicles.	31,000 jobs over 10 years
Medium- & Heavy-Duty Fleet Electrification		
<b>Clean Heavy-Duty Vehicles</b> Section 60101	\$1 billion in grants to purchase zero emission Class 6 and 7 trucks; purchase, install, operate, and maintain charging/fueling infrastructure for zero emission trucks; provide workforce development and training to support the deployment of zero emission trucks; and engage in planning and technical activities around the deployment of zero emission trucks. \$400 million set aside to deploy zero emission trucks in non-attainment areas.	12,000 jobs over 10 years
<b>Grants to Reduce Air Pollution at Ports</b> Section 60102	\$3 billion in competitive rebates and grants to purchase and/or install zero emission port equipment and technology, conduct planning and permitting activities related to deployment, and develop climate action plans at ports. \$750 million set aside to deploy zero emission port equipment and technology in non-attainment areas.	35,000 jobs over 10 years
<b>United States Postal Service Clean Fleets</b> Section 70002	\$3 billion to the Postal Service Fund to purchase zero emission delivery vehicles, and to purchase, design, and install zero emission vehicle infrastructure.	36,000 jobs over 10 years
<b>TOTAL CLEAN VEHICLES JOBS</b>		<b>422,000 jobs over 10 years</b>

Note: All jobs values reflect total jobs expected to be created and supported by each provision over ten years, technically “job-year-equivalents,” including direct jobs, indirect jobs, and induced jobs. Please see BGA’s [Inflation Reduction Act Jobs Report](#) for further information about how to interpret these numbers, and corresponding numbers for all other Inflation Reduction Act provisions.

## The Updated Clean Vehicle Tax Credit

The updated clean vehicle tax credit will shape the future of the global auto manufacturing sector: it brings down the cost of buying battery and fuel cell electric vehicles by up to \$7,500, while incentivizing the establishment of a complete and resilient supply chain for essential battery components in North America. It also ensures that the critical minerals that comprise these batteries are not sourced from countries relying on child and forced labor, and with whom ongoing political tensions risk significant clean vehicle and battery supply chain bottlenecks. And with new income and price caps limiting who, and what vehicles, are eligible for the credit, the updated credit will ensure that the tax benefits are funneled to car buyers for whom the additional benefit really makes a difference.

## The Battery Components Credit

The battery components credit is a \$3,750 credit (half of the maximum \$7,500 credit) which will be awarded to consumers buying vehicles that use batteries with a given percentage of components (by value) manufactured or assembled in North America. 50 percent of the battery components must be North American-made in order to receive the battery components credit before 2024; by 2029, 100 percent of the battery's components in qualifying vehicles must be North American-made.

These components, which include anodes and cathodes, separators, and temperature control technologies and coatings, have represented bottlenecks in the automotive supply chain that have slowed the deployment of electric vehicles despite significant consumer demand. Gradually bringing the supply chains for battery components to North America will ensure that as demand for clean vehicles continues to grow, Americans can benefit from the credit without enduring long wait times due to global supply chain disruptions. This means more high-quality clean vehicles on the road, faster. It also means more good jobs here, and in Mexico and Canada, building a key technology for future generations of drivers.

## The Critical Minerals Credit

The critical minerals credit is a \$3,750 credit (the other half of the maximum \$7,500 credit) which will be awarded to consumers buying vehicles for which the value of the applicable critical minerals in the battery that are mined in countries with which the U.S.

has a free trade agreement, or are recycled in North America, meets a particular threshold. The passed legislation dictates that 40 percent of the value of the critical minerals in a vehicle battery must meet this requirement in order to receive the critical minerals credit before 2024; by 2027, 80 percent must meet this requirement.

The critical minerals in question include lithium, cobalt, manganese, nickel, graphite, and aluminum, among many others. The processes and labor practices with which these minerals are extracted have attracted the attention of labor advocates and humanitarian watchdogs globally, who have surfaced the use of child and forced labor in many of the major countries supplying critical minerals for electric vehicles.<sup>7,8</sup> The single most important vehicle technology of the future cannot be intertwined with these practices. The critical minerals credit incentivizes manufacturers to source critical minerals from countries with which the United States has free trade agreements, or to invest their own resources in North American mining and battery recycling capacities.

The critical minerals credit does not preclude our need for a new national commitment to responsible mining in addition to the reclamation and recycling of these minerals and materials. At present, the United States lacks a comprehensive strategy for responsibly mining these materials at home, for developing secure and sustainable supply chains for their incorporation into the clean energy economy, and for leading through example—in cooperation with other nations that seek to mine and develop these resources in safe, environmentally, and socially responsible ways. Responsible mining practices ensure that economic benefits are shared with workers and communities, prioritize community and worker safety, actively engage with stakeholders to obtain social license, and minimize environmental impact. Responsible domestic mining would help us build out clean technology supply chains here in North America, and serve as an anchor for reshoring and retaining domestic manufacturing.

The clean vehicle provisions in the Inflation Reduction Act work together like pieces of a puzzle. While the Clean Vehicle Credit incentivizes manufacturers to bring their battery supply chains to North America, and to source their critical minerals from U.S. free trade partners, the manufacturing investments bring those ambitious goals within reach. The ATVM Loan Program, for example, works to onshore the major facilities where final assembly of qualifying clean



**Figure 2: The Structure of the Updated EV/Clean Vehicle Tax Credit**

	Existing EV Tax Credit	Updated Clean Vehicle Tax Credit
<b>Maximum Value</b>	\$7,500	\$7,500
<b>Minimum Eligibility Requirements</b>	Battery Electric, or Plug-In Hybrid Vehicle w/ $\geq 4$ kWh Battery  No Assembly Requirement	Battery Electric, Plug-In Hybrid, or Fuel Cell Electric Vehicle w/ $\geq 7$ kWh Battery  Assembled in North America
<b>Structure</b>	\$2,500 Base Credit +\$417 per Addl kWh	\$3,750 Battery Components Credit \$3,750 Critical Minerals Credit
<b>Per-Manufacturer Credit Cap</b>	200,000 Vehicles	No Per-Manufacturer Credit Cap
<b>MSRP Cap</b>	No MSRP Cap	\$55,000 for Cars \$80,000 for SUVs, Vans, Pickup Trucks
<b>Income Cap</b>	No Income Cap	\$150,000 for Individual Filers \$300,000 for Joint Filers
<b>Expiration</b>	Until credit caps are met	December 31, 2032

vehicles will occur, and provides startup funding for manufacturers to build the battery components here, contributing to their eligibility for the \$3,750 battery component portion of the tax credit. The Domestic Manufacturing Conversion Grant does the same, but targets at-risk or recently closed facilities that historically manufactured ICE vehicles and components, ensuring that the incumbent workforce of auto manufacturing workers also reaps the benefits of the transition to cleaner vehicles. Additional non-vehicle specific programs—such as the 48C Advanced Manufacturing Tax Credit and the Battery Manufacturing Production Tax Credit, described in detail in our [manufacturing fact sheet](#)—further smooth manufacturers’ path toward a clean vehicle future.

These investments will also advance the clean heavy-duty vehicle market, which will see a significant demand bump from the Clean Heavy-Duty Vehicles Grants, and the Grants to Reduce Air Pollution at Ports. Undergirding all of these provisions is the Alternative Fueling Property Credit, which leverages private dollars to ensure that the clean vehicles deployed and enabled by all of the above provisions have reliable access to the infrastructure they need to charge and fuel.

### Looking Ahead

The transportation provisions highlighted in this document will create and support over 420,000 jobs over ten years. Passing the bill will be the first step on a long journey to a mobility system that is equitably distributed, accessible to all, and will protect and uplift the hundreds of thousands of workers on whom a clean and modernized mobility system will depend.

[Click here](#) for more on BGA’s priorities in the Inflation Reduction Act.

[Click here](#) for additional information about the expected impact of the Inflation Reduction Act on jobs in BGA’s key priority areas.

## ENDNOTES

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