

5 July 2023

TO: Administrator Regan
U.S. Environmental Protection Agency
RE: Docket No: EPA-HQ-OAR-2022-0829
Submitted Electronically via Regulations.gov

BlueGreen Alliance Comment on the Proposed Multi-pollutant Emissions Standards for MY 2027 and Later Light- and Medium-Duty Vehicles

The BlueGreen Alliance (BGA) unites labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a clean, thriving, and equitable economy. We thank you for the opportunity to comment on the proposed Multi-pollutant Emissions Standards for MY 2027 and Later Light- and Medium-Duty Vehicles.

Climate change, economic injustice, and racial inequity are the most fundamental challenges we face today—and we know they're inextricably intertwined. In the transportation sector, which accounts for nearly 30% of U.S. greenhouse gas emissions, this intersection is visible in the disproportionate impact of transportation emissions on non-white communities.¹ It's visible in the disparities in access to cleaner vehicles and other mobility options across income levels. And it's visible in the economic impacts of decades of disinvestment in auto manufacturing communities, which have seen good jobs offshored and anchor facilities shuttered due to ill-conceived policies that gutted the middle class. That's why it is critical that regulators, policymakers, and advocates coordinate standards, policies, investments, and infrastructure projects that engage and benefit all people—from the manufacturing workers who build the vehicles of the future, to the people who drive them, to the communities they drive through. Strong vehicle emissions standards—accompanied by policies to rebuild manufacturing, protect and create good family supporting jobs, and revitalize communities—are critical to achieving these aims.

While the U.S. Environmental Protection Agency (EPA) finalizes its Multi-pollutant Emissions Standards for Light- and Medium-Duty Vehicles, BGA urges the consideration of the following principles:

- 1) Climate policy—when carefully and proactively designed—has the potential to economically revitalize the auto manufacturing workers and communities who will make ambitious emissions and pollution reduction targets possible.
- 2) EPA's light- and medium-duty vehicle standards have significant impacts on the U.S. auto manufacturing sector, with major opportunities and risks for workers and the communities

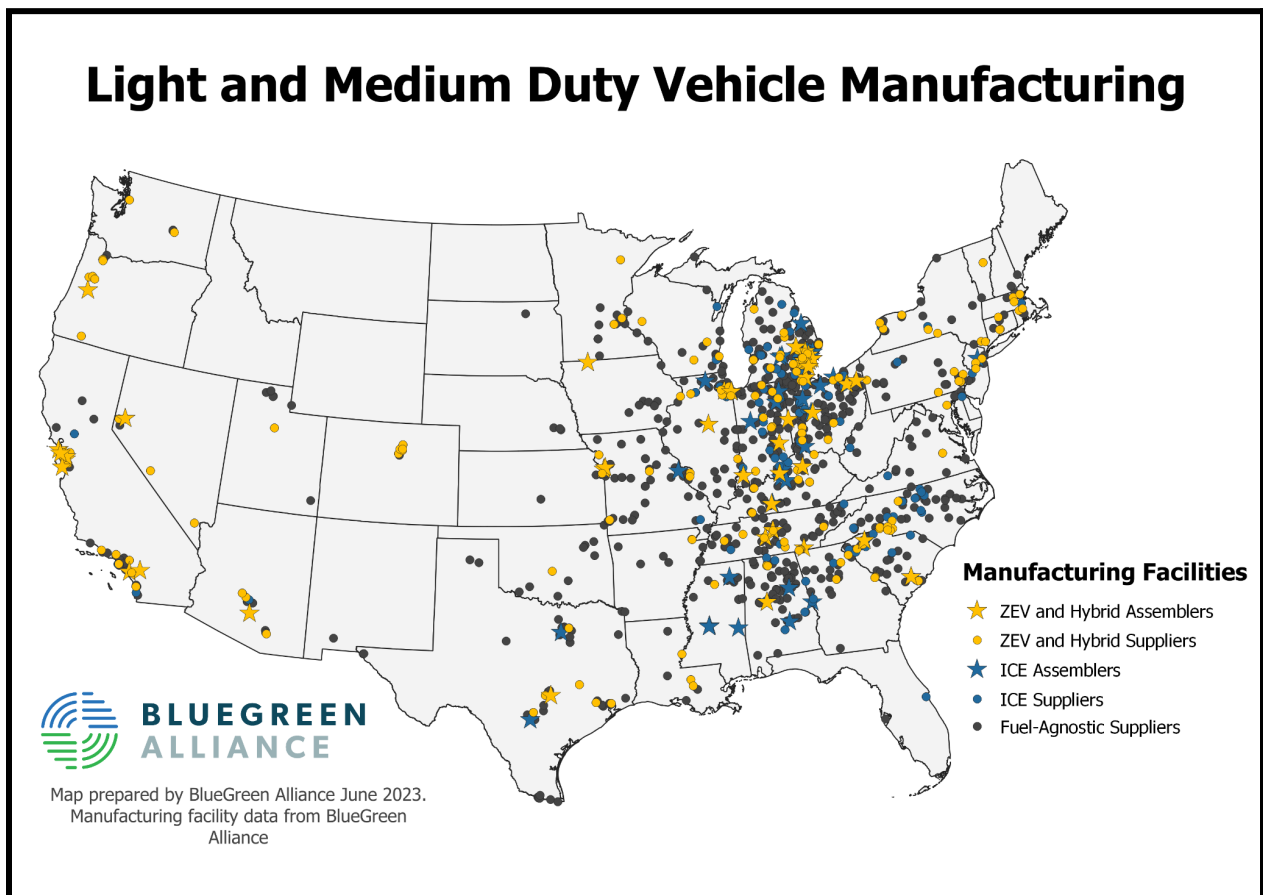
¹ U.S. EPA, "Study finds exposure to air pollution higher for people of color regardless of region or income," September 2021. Available Online: <https://www.epa.gov/sciencematters/study-finds-exposure-air-pollution-higher-people-color-regardless-region-or-income>

they live in. EPA should leverage its analytical and research capacities to fully understand these impacts and conduct this rulemaking process accordingly.

- 3) Industry stakeholders must be honest brokers in both the stakeholder process, and in their efforts to comply with the standards.

Strong, technology-forcing vehicle standards are essential to meet climate goals, advance environmental justice, and create good jobs in the clean economy. The transportation sector is the single largest contributor to climate-warming greenhouse gas emissions in the U.S., and the local air pollutants emitted by vehicles, including particulate matter (PM), nitrous oxides (NOx), and volatile organic compounds (VOCs) have disproportionate impacts on low-income and non-white communities. Meanwhile, the supply chains for light- and medium-duty vehicles and the manufacturing jobs within them—are critical to the economic health and stability of auto manufacturing communities across the country (See Figure1).

Figure 1: Light- and Medium-Duty Vehicle Assemblers and Component Manufacturers



Source: BGA

Contrary to the repeated threats of certain industry stakeholders opposing regulation, strong vehicle emissions standards do not have to come at the cost of good auto manufacturing jobs. In fact, they can support U.S. competitiveness in the global auto market, which protects and creates jobs. BGA analysis on the impact of former rounds of light-duty vehicle emissions standards has found that when they are well-designed and supported by worker protections and investments, standards can generate high-quality jobs, and position the domestic auto industry as a leader in a competitive global market.^{2, 3}

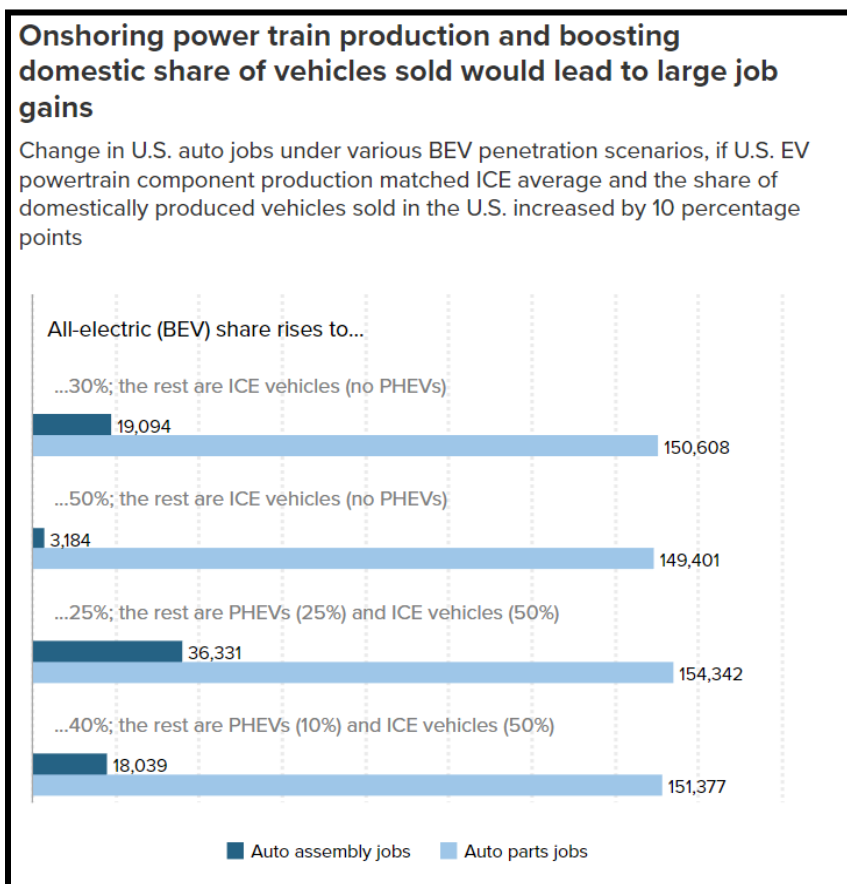
A 2021 Economic Policy Institute (EPI) report conducted in collaboration with BGA, the United Auto Workers, the United Steelworkers, and the AFL-CIO modeled how different timelines and scenarios of light-duty electrification in the U.S. would impact auto manufacturing and supply chain jobs.⁴ The report found that over 150,000 new auto manufacturing and supply chain jobs *could* be created under the assumption of 50% new EV sales by 2030—a timeline that closely matches the EPA’s preferred proposal (See Scenario 2 in Figure 2). However, such job gains are contingent upon a significant onshoring of the EV supply chain such that 1) the domestic content of EVs at least matches that of ICEs, and 2) there is a 10% increase in the share of U.S.-made vehicles sold in the U.S. auto market. A tech-forcing rule that drives electrification of some share of the vehicle fleet, coupled with investments to ensure that the vehicles and their components are made here, can be a major economic boon to communities across the country.

² BlueGreen Alliance, *Supplying Ingenuity II*, May 2017: Available Online: <https://www.bluegreenalliance.org/resources/supplying-ingenuity-ii-u-s-suppliers-of-key-clean-fuel-efficient-vehicle-technologies/>.

³ BlueGreen Alliance, *Tech@Risk*, August 2019. Available Online: <https://www.bluegreenalliance.org/resources/techrisk-the-domestic-innovation-technology-deployment-manufacturing-and-jobs-at-risk-in-stepping-away-from-global-leadership-on-clean-cars/>.

⁴ Economic Policy Institute, *The stakes for workers in how policymakers manage the coming shift to all-electric vehicles*, September 2021. Available Online: <https://www.epi.org/publication/ev-policy-workers/>.

Figure 2: Potential Auto Manufacturing Job Growth at EV Deployment Scenarios

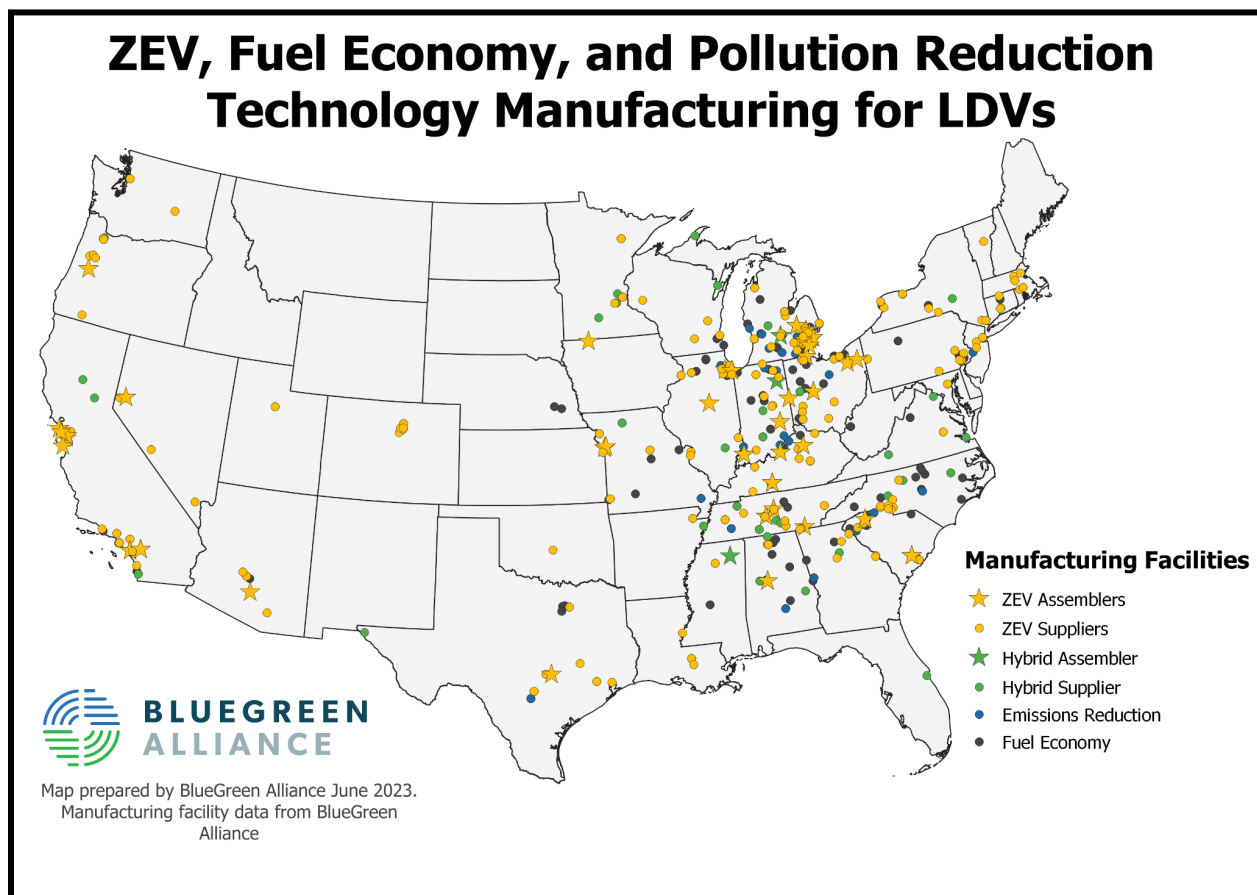


Source: Economic Policy Institute

And while automakers will certainly need to produce and sell zero-emission vehicles to meet the standards laid out in EPA's range of proposals, the standards are ultimately performance-based, which means that manufacturers can leverage a range of pollution-reducing technologies to help bring their fleets into compliance with both the GHG emissions standards and the local pollutant emissions standards within the proposals. These technologies include plug-in hybrids, waste heat recovery systems, aerodynamics, lightweighting, and gas particulate filters (GPFs).

The range of EPA's proposals effectively advances research, development and deployment of zero-emission technologies like those in battery electric and fuel cell vehicles, while also pushing other pollution reducing technologies. The tech-forcing and tech-agnostic nature of EPA's proposals means that the standards have the potential to create and protect domestic manufacturing jobs in a diverse range of facilities, from those producing battery components for plug-in hybrids to those making gas particulate filters for pickup trucks (see Figure 3). A standard that advances the deployment of zero emission *and* tailpipe pollution-reducing technologies provides manufacturers with ample flexibility as they determine how they will meet the requirements, while also maximizing the standards' potential to create and protect jobs in the domestic automotive supply chain.

Figure 3: Zero Emission, Fuel Efficiency, and Tailpipe Pollution Reduction Technology Manufacturing for Light- and Medium-Duty Vehicles



Source: BGA Research

Automakers have historically succeeded at reducing criteria pollutants from their ICE fleets while investing in their ZEV production capacities. EPA’s light- and medium-duty standards must incentivize them to continue to achieve gains in reducing tailpipe pollutants and in their ZEV offerings. Reducing tailpipe pollution emissions from ICE vehicles is technologically feasible and affordable; there are off-the-shelf technologies like GFPs that automakers are already applying to their vehicles sold in Europe and Asia in order to comply with emission regulations there. Such technologies could easily and affordably be applied to light- and medium- duty vehicles sold in the United States, with no additional research and development needed. Because EPA’s standards are performance-based and technology-agnostic, automakers can and will employ a combination of ZEV and ICE vehicle improvement technologies to comply, while supporting a range of auto manufacturing supply chain jobs.

The fact that EPA’s proposed standards address both GHG emissions *and* local pollutant emissions clearly broadens the scope of auto manufacturing supply chain communities that stand to grow

from increased demand for a range of efficiency and pollution reducing technologies. It is essential that automakers achieve gains along both axes.

EPA must consider how the transition to clean vehicles will impact manufacturing workers and the communities they live in. This should be an essential part of the comprehensive analysis that EPA conducts to project its proposals' economic impacts. The map in Figure 1 plots approximately 1,300 facilities manufacturing light- and medium-duty vehicles and their components. Of these facilities, approximately 225 manufacture ICE light- and medium-duty vehicles and their components, like engines and transmissions, fuel efficiency technologies, and tailpipe pollution reducing technologies. These facilities in the ICE supply chain, the nearly 900 facilities making “fuel agnostic” components for light- and medium-duty vehicles, and other as yet unbuilt ZEV manufacturing facilities may experience employment impacts as ZEVs become increasingly cost competitive compared to ICE vehicles.

EPA already develops its proposed standards based on sophisticated economic analyses that model the impact of the proposal on total fuel cost savings, vehicle maintenance savings, and health cost savings from improved health outcomes. EPA's economic analysis should also seek to project the economic and employment impacts of the shift to clean vehicles on auto manufacturing communities. For each of EPA's proposals and alternatives, this analysis should, at minimum, identify light- and medium-duty vehicle manufacturing communities (as in Figure 1), quantify the share of each community's economy that is supported by jobs associated with light- and medium-duty vehicle manufacturing, and quantify the number of jobs associated with that sector. EPA should collaborate with the U.S. Department of Labor and the U.S. Department of Energy (DOE) to conduct this analysis. EPA may consider structuring its analysis to identify communities that are particularly reliant on a domestic vehicle manufacturing supply chain, potentially identified as those with light- and medium-duty vehicle manufacturing “clusters”—or geographic areas where there are at least two manufacturing facilities within a 50-mile radius that are producing light- and medium-duty vehicles, or components for them. BGA collects detailed supply chain data that can support this analysis.

Considering and quantifying the employment opportunities and risks associated with each of EPA's proposals is essential to ensuring that the regulations advance equity along economic axes, as well as climate and public health ones. The domestic auto manufacturing sector has historically been characterized by a higher unionization rate, community-supporting wages and benefits, the provision of pathways to the middle class (particularly for people without a four-year college education), and strong representation of Black workers. Research from EPI finds that “Black workers account for 12.5% of workers economy wide, but 16.6% of workers in the auto sector, while workers without a four-year degree account for 62.2% of workers economy wide, but 74.6% in the auto sector.”⁵ The auto manufacturing sector represents a critical path to the middle class for the very workers and communities that have disproportionately borne the brunt of neoliberal

⁵ Economic Policy Institute, *The stakes for workers in how policymakers manage the coming shift to all-electric vehicles*, September 2021. Available Online: <https://www.epi.org/publication/ev-policy-workers/>.

economic and trade policies. It is therefore essential that EPA leverage available data to project how its proposals will shape the domestic auto manufacturing sector, and the workers and communities that comprise it. Such analysis would also help inform stakeholders weighing in on the proposals by projecting tangible, on-the-ground, economic impacts of the transition to cleaner light- and medium-duty vehicles, rather than limiting the scope of the economic analysis to fleet owners and automakers.

EPA must hold automakers and industry stakeholders accountable to workers and communities in their pursuit of regulatory compliance. In particular, this means collecting data to ensure that standards do not exacerbate the offshoring of the automotive supply chain, or facilitate rent-seeking behavior from automakers seeking to reduce their regulatory burdens and labor costs. BGA research demonstrates the significant economic footprint that the light- and medium-duty auto manufacturing sector has in the United States. This footprint represents both an opportunity and a risk, depending on whether or not the United States emerges as a global leader in the manufacturing of clean vehicles during this critical transitional period. The past two decades have seen significant offshoring of the automotive supply chain to other countries in Asia, Europe, and North America, where automakers have benefitted from lower labor costs, looser environmental regulations, and favorable tax regimes. Between 1998 and 2019, employment in the manufacturing of motor vehicles and motor vehicle components fell by more than 20%.⁶ A part of a larger globalization trend, this shift not only gutted auto manufacturing communities in the United States, but it also allowed auto suppliers to establish supply chains in other countries, often with minimal labor protections and loose environmental standards.⁷

Automakers have announced \$120 billion in new investments in clean vehicle manufacturing in the last eight years, with over 40% of those investments occurring in the six months following the passage of the Inflation Reduction Act in August 2022.⁸ Domestic automakers' 2023 Q3 profits were the highest they have been since 2016.⁹ Moreover, due to the passage of transformative programs in the Inflation Reduction Act and the Bipartisan Infrastructure Law, automakers and their suppliers have more federal resources than ever before to support the transition to cleaner vehicles in ways that do not shortchange their workers, their communities, or the environment.

⁶ Economic Policy Institute, *Botched policy responses to globalization have decimated manufacturing employment with often overlooked costs for Black, Brown, and other workers of color*, January 2022. Available Online: <https://www.epi.org/publication/botched-policy-responses-to-globalization/>.

⁷ Strategic Management Journal, *Offshoring pollution while offshoring production*, March 2017. Available Online: <https://onlinelibrary.wiley.com/doi/10.1002/smj.2656>.

⁸ Environmental Defense Fund, "Report finds U.S. investments in electric vehicle manufacturing reach \$120 billion, create 143,000 new jobs," March 2023. Available Online: <https://www.edf.org/media/report-finds-investments-us-electric-vehicle-manufacturing-reach-120-billion-create-143000>.

⁹ U.S. Bureau of Economic Analysis, *Corporate profits with inventory valuation adjustments: Domestic industries: Nonfinancial: Manufacturing: Durable goods: Motor vehicles, bodies and trailers, and parts*, March 2023. Available Online: <https://fred.stlouisfed.org/series/N411RC1Q027SBEA>.

EPA recently published a Request for Information (RFI) targeting automakers manufacturing clean school buses receiving funding through the Clean School Bus Program.¹⁰ This optional RFI asks bus manufacturers to provide information about worker voice (whether employees are covered by a collective bargaining agreement, whether the company is committed to maintaining union neutrality, etc.), employee benefits, inclusive hiring practices, training and advancement programs, and community partnerships. Such an RFI can be a powerful tool through which EPA can solicit information about how manufacturers interact with their employees and their communities, and facilitate a “race-to-the-top” for the quality of auto manufacturing jobs in the United States. EPA should create a new RFI for automakers regulated by the proposed light- and medium-duty standards that builds upon the data collected by the Clean School Bus RFI to illuminate the quality of jobs currently supported by the light- and medium-duty manufacturing sector. The new RFI should, at minimum, seek detailed information about worker voice, employee wages and benefits, inclusive hiring practices, training and advancement programs, and community partnerships. In order to improve upon the Clean School Bus RFI, automakers should be prompted to provide granular information that not only reveals *whether* workers receive healthcare benefits, for example, but also *the quality* of those benefits.¹¹ This RFI could also apply to vehicle battery manufacturers, fuel efficiency technology manufacturers, tailpipe pollution reducing technology manufacturers, and other advanced materials and components manufacturers in the automotive supply chain, which will play a significant role in automakers’ ability to meet increasingly stringent emissions standards.

At the same time, EPA must consider that the manufacturing investments from the Inflation Reduction Act and Bipartisan Infrastructure Law will take time to achieve their full production capacity. EPA should coordinate with DOE, the U.S. Department of Transportation (DOT), and the U.S. Department of Commerce (DOC) to ensure that the manufacturing investments from the Inflation Reduction Act and Bipartisan Infrastructure Law will be fully leveraged to support regulatory compliance. Programs like the Battery Manufacturing and Recycling Grants (DOE), the Battery Material Processing Grants (DOE), the Domestic Manufacturing Conversion Grants (DOE), the 48C Advanced Manufacturing Tax Credit (DOE/DOC), the Advanced Technology Vehicle Manufacturing Loan Program (DOE), the National Electric Vehicle Infrastructure (NEVI) Program (DOT), and the Charging and Fueling Infrastructure Grant Program (DOT) all provide unprecedented federal resources that manufacturers and fleet owners can leverage to support both supply and demand for low- and zero-emission light- and medium-duty vehicles. However, these programs take time to bear fruit—whether that means a complete public, affordable, and interoperable EV charging network, or a robust domestic supply chain for vehicles eligible for the battery component and critical mineral requirements of the 30D Clean Vehicle Tax Credit.

¹⁰U.S. EPA, Request for information about OEM job quality and workforce development practices, April 2023. Available Online:

<https://www.epa.gov/system/files/documents/2023-04/fy23-csb-oem-workforce-req-info-2024-04.pdf>.

¹¹ EPA. Bus manufacturer job quality and workforce development practices, June 2023. Available Online:

<https://www.epa.gov/cleanschoolbus/bus-manufacturer-job-quality-and-workforce-development-practices>



It is essential to workers and communities that these programs be carefully designed and implemented, with robust stakeholder engagement. This helps ensure that they adhere to Justice40 requirements and new Build America, Buy America provisions that are critical to ensuring that federal programs support domestic manufacturing investments that are fully supported by their communities.

With that, EPA must account for the time it takes to convert federal awards and allocations into actual domestic production capacity and critical on-the-ground infrastructure. EPA should coordinate with DOT and DOE to fully assess the availability of charging and fueling infrastructure for electric vehicles, and related grants and loans.

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Ultimately, the transition to cleaner vehicles must function to raise the job quality and safety standards associated with all impacted workforces, including auto assembly workers, and supply chain workers. It is essential, but not enough, to create and protect auto manufacturing jobs in the United States. As increasingly stringent standards drive the transition to cleaner vehicles, we must also work to ensure that all jobs that will facilitate the transition are good, community-supporting jobs in safe and democratic work environments, where workers have the free and fair choice to join a union. The current landscape—wherein some new manufacturing jobs (especially in the battery sector) are low-paid contract roles in hazardous facilities, located in states where employers can evade union organizing—must be corrected.¹²

Deregulation, unfavorable trade policy, and the systematic undermining of labor laws have been chipping away at worker power in this country for decades. But as clean vehicle technologies continue to transform the auto industry—regulators, policymakers, advocates, and organizers have an important opportunity to determine what the jobs of tomorrow’s auto industry will look like. EPA must leverage its regulatory power to set the industry on the right course, for the climate, for public health, and for workers.

Thank you for the opportunity to comment.

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¹² The Washington Post. “The unlikely center of America’s EV battery revolution,” April 2023. Available Online: <https://www.washingtonpost.com/climate-environment/2023/04/17/georgia-evs-battery-belt/>.