



ALLIANCE
FOR AUTOMOTIVE
INNOVATION



March 29, 2021

President Joseph R. Biden, Jr.
The White House
1600 Pennsylvania Avenue
Washington, DC 20500

Dear President Biden:

We write today on behalf of a diverse group of motor vehicle manufacturers, suppliers, and hundreds of thousands of United Auto Workers members and retirees, who are committed to working toward a net-zero carbon transportation future that includes a shift to electric-drive vehicles. This shared vision has brought the auto industry in the United States to a transformative moment, one that will shape a cleaner future and redefine motor vehicle transportation for generations to come.

For the U.S. to be a leader in this transformation, we must work collaboratively to develop a comprehensive national vision and strategy. This is not just about the future of the auto industry in the U.S., it is about the nation's global competitiveness, economic security, and the transition of the U.S. workforce. Nations that lead the development and adoption of innovative technologies will also shape supply chains and job creation, define global standards and, potentially, reshape the international marketplace. However, neither the current trajectory of consumer adoption of EVs, nor existing levels of federal support for supply- and demand-side policies, is sufficient to meet our goal of a net-zero carbon transportation future.

We stand ready to work with your Administration to define the bold, comprehensive vision and innovation that will place the U.S. at the forefront of creating a cleaner future for motor vehicle transportation. This transformation is greater than any one policy, branch or level of government, or industry sector. It will require a sustained holistic approach with a broad range of legislative and regulatory policies rooted in economic, social, environmental, and cultural realities. Such an approach will complement and amplify significant private sector resources that will accelerate a net-zero carbon transportation future. If we work without a comprehensive plan, our nation will fall short of this goal.

Automakers and suppliers will invest \$250 billion in electrification by 2023, including Plug-in Hybrid Vehicles (PHEV), Battery Electric Vehicles (BEV) and Fuel Cell Electric Vehicles (FCEV) (collectively, "EVs"). IHS Markit predicts there will be 130 EV models available in the U.S. by 2026. Even with the collective efforts of the public and private sectors, of the 278 million light-duty vehicles currently registered in the U.S., only 1.5 million are EVs. And despite growing consumer interest and more than 50 EV models available, EVs only made up about two percent or roughly 300,000 of the 14.5 million new vehicle sales last year. This is why we need a comprehensive plan that takes the present market realities into consideration, as well as the on-going investment and innovation in internal combustion engine (ICE) technologies.

This bold, comprehensive strategy is required to establish the U.S. as a leader in the next generation of clean transportation innovation. Efforts that incentivize wider-scale EV adoption, build out the necessary infrastructure, and facilitate consumer awareness are essential components to EV market expansion. As we work toward the future of clean transportation, it will be critical to ensure this transition benefits all communities, supports American workers, and enhances U.S. competitiveness and economic security.

We look forward to working with your Administration and other public and private stakeholders to craft and implement a comprehensive plan that includes both the supply- and demand-side policies necessary to realize the transition to a cleaner future. We believe that a comprehensive approach must focus on three key areas: Consumers; Infrastructure; and Innovation, Manufacturing and Supply Chain. The following reflects areas where we have general alignment.

Consumers – Affordability and Awareness

The auto sector has made significant progress driving down battery and fuel cell costs. Even still, further research and development investments will be needed to realize “cost, utility, and convenience parity” between EVs and their internal combustion counterparts. EVs currently cost significantly more to produce than equivalent gasoline cars or trucks. This divide grows when considering “convenience and utility parity,” which requires larger batteries to support longer EV ranges commensurate with consumer expectations and needs. Larger, more capable vehicles (e.g., pickup trucks and SUVs) used by individuals and businesses for a variety of purposes may require even higher-capacity batteries. To bridge these divides, we offer the following policy recommendations:

- Address the cost premium and directly support sales of EVs by expanding and extending the 30D Federal Tax Credit for PHEVs and BEVs and enacting a long-term extension of the 30B Fuel Cell Motor Vehicle Tax Credit to help equalize the upfront cost to consumers.
- Prioritize additional R&D investment (federal and private) to reduce costs and improve performance of batteries, fuel cells, and hydrogen fuel generation.
- Direct the Secretary of Energy and Secretary of Transportation to develop and fund programs to expand consumer awareness and adoption of EVs and to highlight infrastructure availability.
- Set ambitious federal fleet requirements to adopt EVs, which helps to increase consumer awareness by putting more vehicles on the road and provides more consumers, such as federal employees, with EV driving experience.

Charging and Refueling Infrastructure

While reducing costs and increasing consumer awareness, we must also strive for greater “convenience parity” that ensures access to abundant electric charging and hydrogen fueling infrastructure. Publicly available charging infrastructure not only eases perceived concerns about “range anxiety,” but also substantially increases consumer awareness of the technology.

Currently, the majority of EV charging takes place at home, and that is likely to continue into the future. Charging at home can be inexpensive, convenient, and reliable. Extending these benefits to all EV owners will require new and targeted efforts. Installing charging is a fairly straightforward prospect for those who own their own homes and have dedicated off-street parking in a garage or driveway, but policymakers will need to carefully consider the tens of millions of Americans who rent or live in multi-unit dwellings (MUDs). While public DC fast charging stations or other public chargers could meet some needs, the

convenience of refueling at home is a key advantage of EVs, and it would be unreasonable and unequitable to expect renters and MUD residents to pay more and spend time away from home each week to charge publicly. Numerous studies show that the cost to retrofit a home or business with EV charging equipment is several times more expensive than installing it during new construction, so designing EV-ready building codes must be part of the answer. Supporting charger installation at apartment complexes or renter-occupied housing that already exists will be necessary, too. Public policies will need to account for this and find ways to support installation of charging options that serve all drivers.

All stakeholders must work together on public policy efforts, such as federal tax incentives, grants, rebates and other mechanisms to spur significant refueling infrastructure development in three key areas: homes, workplaces, and highway and other public locations—especially since currently there are only approximately 100,000 public charging outlets nationwide, and only about 18,000 of these are DC fast chargers capable of rapid fill-ups. The following are policy recommendations to expand charging and refueling infrastructure that can also help to increase consumer awareness and prepare for expanded EV sales:

- Extend the duration of and expand the 30C Federal Tax Credit for alternative fuel vehicle refueling property (including multiple charge points at a single location), which supports electric vehicle supply equipment (EVSE), hydrogen fueling infrastructure, and residential EV charging. The 30C Federal Tax Credit should also be expanded to include medium- and heavy-duty alternative fuel vehicle refueling property.
- Establish a grant program to build public charging and hydrogen refueling infrastructure along the Federal Highway System by expanding alternative fuel corridors. Additionally, grant programs could also serve a similar purpose along secondary roads and within metropolitan areas.
- Establish a grant program allowing states to update State Energy Transportation Plans, including plans to deploy charging equipment and promote the modernization of the electric grid to accommodate charging equipment.
- Expand Congestion Mitigation and Air Quality Grants (CMAQ) to allow funds to be used for installation of charging and hydrogen refueling infrastructure.
- Commit substantial resources, such as a federal rebate program for charger installation or hydrogen refueling infrastructure at workplaces, MUDs, and in underserved and disadvantaged communities.
- Develop a Federal Clean Fuels Policy that further supports reductions in transportation carbon emissions and provides revenue that can be reinvested into charging infrastructure.
- Direct the Secretary of Energy to establish or update model building codes for integrating charging or battery storage equipment into residential and commercial buildings, as well as public parking spaces – including future retrofits to existing facilities.
- Establish a grant program to assist local governments, universities, non-profits, research institutions, independent system operators, public utilities commissions, and utilities in identifying optimal locations to install charging stations and ensure grid resiliency, and in researching and developing technologies to convert existing natural gas pipelines and power plants to support hydrogen.
- Direct the Secretary of Energy to make loan guarantees for EVSE and hydrogen refueling infrastructure.
- Include EV charger installation as eligible for home efficiency retrofit funds or otherwise consider establishing dedicated retrofit programs to wire older structures for Level 2 charging.

Innovation, Manufacturing, and Supply Chain

While the demand-side solutions outlined above can help address near-term challenges, they will contribute to sustained U.S. leadership in automotive innovation only if they are aligned with supply-side realities. Vital aspects of the EV supply chain require the manufacturing of batteries (critical minerals extraction, processing, battery cell production, end of life recycling) and fuel cell stacks. In 2019, Chinese chemical companies accounted for roughly 80 percent of the world's total output of advanced battery raw materials. In fact, the supply side represents one of the best opportunities to develop long-term and sustainable U.S. leadership through manufacturing investments. From the outset, we believe it is necessary to preserve the full and immediate deductibility of R&D expenses, which is slated on January 1, 2022 to erode to five-year deductibility. In addition, we offer the following specific policy recommendations to encourage and incentivize investment by manufacturers and suppliers:

- Expand the 48C Advanced Energy Manufacturing Tax Credit to allow vehicle and equipment manufacturers to retool, expand, or build new facilities for the manufacture, or recycling, of advanced light-, medium-, and heavy-duty electric and fuel cell vehicles, batteries, fuel cells, components, and related infrastructure in the U.S.
- Expand investment in the Domestic Manufacturing Conversion Grant Program and appropriate funds to accelerate the domestic manufacture of batteries, power electronics, electric motors, and other technologies in zero emission vehicles.
- Promote national security and economic security enhancements through the development of U.S.-based supplies of critical minerals (extraction, processing, recycling), battery and fuel cell manufacturing, and other critical components, including semiconductors.
- Expand R&D incentives that maintain and enhance American automobile manufacturers' and suppliers' leadership in the development and production of new innovations that will make the zero-emission future a reality.
- Expand, modernize, and fund the Advanced Technology Vehicles Manufacturing Incentive grant and loan program at the Department of Energy.
- Expand and target workforce training and development programs that will upskill the existing workforce and train new workers to support both our evolving workforce needs and future technology innovations.
- Complement the various tax credits that support renewable energy production by creating a new investment tax credit to support hydrogen production and storage.
- Establish Clean Energy Manufacturing Grant Programs to provide grants for manufacturers, including vehicle manufacturers and equipment and component suppliers, to reequip, expand, and establish facilities for the manufacturing of clean energy technologies and components.

While the approach we have outlined is robust, it should not preclude other important efforts by states and localities that support increased adoption of zero emission transportation via demand- and supply- side solutions. These include corresponding purchase/lease incentives, charging options, low carbon fuel standards, regional market-based carbon reduction efforts, fleet purchases, and use of high-occupancy vehicle lanes for travel.

It will take collaboration and a sustained commitment to realize the U.S.'s political, economic, environmental, and competitive interests in a net-zero emission transportation future. Many of the proposals outlined in this letter align with provisions introduced by members in both chambers and your Administration. From the infrastructure investments reflected in your commitment to 500,000 charging stations nationwide, as well as investments in charging and refueling infrastructure included in the

The Honorable Joseph R. Biden, Jr.
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CLEAN Future Act, LIFT America Act, and other legislation from both this Congress and last, to the supply chain and manufacturing support also included in those same proposals as well as the American Jobs in Energy Manufacturing Act and the GREEN Act, it is clear policymakers understand the broad range of investments necessary to realize this transformation.

On supply chain efforts alone, the proposals outlined above contemplate anywhere from a \$4 billion to over \$12 billion investment in the 48C tax credit, \$12 billion to \$25 billion for domestic manufacturing conversion grants, and a ten-year reauthorization of the Advanced Technology Vehicle Manufacturing incentive program. These are steps in the right direction, and if enacted, would not be an insignificant commitment of federal resources. Our organizations and members have been supportive of some of these foundational proposals. However, in order to drive real change, solidify U.S. leadership in clean energy innovation, and support a transition of the automotive workforce, we need to think big because individual policy proposals or investments alone will not result in a successful transition to a net-zero transportation future.

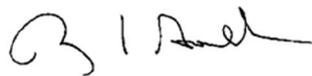
To that end, we are working with our members, key stakeholders, and other experts to identify the appropriate size and scale for these programs to most effectively support the shift to an electric-drive future for consumers, the environment, the economy, and the millions of workers depending on the auto industry for their livelihoods. We look forward to continuing that conversation with your Administration and elected officials in Congress. We must seize this moment and work collaboratively to develop a coherent, national approach to support the transition to an electric-drive future. The coming years will be pivotal to building a strong foundation to support increased adoption and use of electric vehicles above the two percent of new vehicle purchases in 2020.

The road leads to an increasingly electrified future. Let's drive there together.

Sincerely,



John Bozzella
President and CEO
Alliance for Automotive Innovation



Rory Gamble
President
United Autoworkers International Union



Bill Long
President & CEO
Motor & Equipment Manufacturers Association

CC: Speaker Nancy Pelosi
Senate Majority Leader Chuck Schumer
Senate Republican Leader Mitch McConnell
House Republican Leader Kevin McCarthy

About our organizations:

The Alliance for Automotive Innovation (Auto Innovators) is the singular, authoritative and respected voice of the automotive industry, representing nearly 99 percent of cars and light-duty trucks sold in the United States. Our members include vehicle manufacturers, original equipment suppliers, technology and automotive-related mobility companies and trade associations. The Alliance for Automotive Innovation is headquartered in Washington, DC, with offices in Detroit, MI and Sacramento, CA.

Since 1904, **the Motor & Equipment Manufacturers Association** has been the voice of the automotive and commercial vehicle supplier industry — the largest employer of manufacturing jobs in the United States, employing more than 900,000 Americans nationwide. Across the entire range of new vehicle innovation — from autonomous to net-zero carbon technologies — vehicle suppliers are leading the way. Our member companies conceive, design and manufacture the original equipment systems and technologies that make up two-thirds of the value in every vehicle. Member companies also supply the aftermarket with the parts that keep millions of vehicles on the road, fueling international commerce and society's need for transportation. And all of our members' work is done with a focus on public safety and the environment.

The United Autoworkers International Union represents over 400,000 active members and 575,000 retirees. UAW members assemble vehicles, make vehicle parts, assemble heavy trucks and agriculture implement products. In addition, UAW members work as casino dealers, higher education workers, government workers, aerospace workers, food and beverage production and many other fields. The UAW is active in advocating for its members, working families, communities and has a long history of civil rights and human rights support.