STATEMENT OF GENEVIEVE CULLEN, PRESIDENT, ELECTRIC DRIVE TRANSPORTATION ASSOCIATION SUBMITTED TO THE

SUBCOMMITTED TO THE SUBCOMMITTEE ON ENERGY HOUSE ENERGY AND COMMERCE COMMITTEE MAY 5, 2021

The Electric Drive Transportation Association (EDTA) is the cross-industry trade association promoting the advancement of electric drive technology and electrified transportation. EDTA's members represent the entire value chain of electric drive, including vehicle manufacturers, battery and component manufacturers, utilities, charging infrastructure developers and others. Collectively, we are committed to realizing the economic, national security and environmental benefits of displacing oil with electricity in battery and fuel cell-powered vehicles.

EDTA believes that achieving net-zero emissions transportation requires a comprehensive effort, across multiple sectors of the economy, to electrify transportation with plug-in and fuel cell vehicles and infrastructure. EDTA's members represent the largest source of employment in the electric transportation supply chain, and they are poised for major expansion of those opportunities. With U.S. leadership, the transition to e-mobility will ensure our economic future while driving innovation that reduces emissions, creates jobs and boosts opportunity throughout the economy.

To secure our leadership, the U.S. needs to catalyze growth with significant, long-term investments in market expansion, accelerate technology development, and rapidly expand deployment of the e-mobility ecosystem. As detailed in our EV Leadership Plan, which accompanies this statement, action is required in five key areas: scaling the passenger vehicle market, accelerating commercial fleet adoption, expanding charging infrastructure, building a 21st century power grid and advancing next-generation technology through research and development. The legislation before the Energy Subcommittee today addresses many of these critical areas.

As the bills under consideration attest, a comprehensive approach is essential to the success of our shared effort to build the 21st century's transportation sector. EDTA commends the Committee and the Chairman for advancing policies to provide resources for vehicles, infrastructure, planning and manufacturing and we thank you for the opportunity to share our views on these critical proposals.

HR 1512, The CLEAN Future Act

The provisions of Title 4-Transportation include important programs to accelerate deployment of infrastructure, modernize building codes, ensure equitable access to charging and refueling, expand federal investment in electric drive alternatives in the medium- and heavy-duty fleet, update the ATVM program and Sec 131 of the *Energy Independence and Security Act*.

Specifically, in Subpart D Part 1, we support the creation of rebates for deployment of electric drive infrastructure for plug-in and fuel cell vehicles, as contained in HR 1512 and HR 2852. We appreciated the opportunity to provide input to Mr. Tonko to ensure that the program supports investment in the diverse charging and refueling options that are needed in Level 2, DCFC and hydrogen applications. The additional flexibility to revisit the apportionment of the funds will allow for the program to evolve with this emerging ecosystem. We look forward to continuing to work with the Committee as you refine these provisions to maximize the effectiveness of the program in building out electric drive infrastructure.

EDTA supports updating building codes as essential to efficient growth of electric drive infrastructure, particularly in multi-unit dwellings and funding for integrating electric vehicle infrastructure into state planning through State Energy Conservation Plans.

We also support amending Sec. 131 of the *Energy Independence and Security Act* to recognize advances in electric drive technologies, including medium- and heavy-duty electrification and the need for investment in recycling and secondary uses of batteries.

HR 1512 provides needed and beneficial updates to federal fleet purchasing requirements. The bill's graduated increases in the *Energy Policy Act's* alternative fuel requirements provide a powerful roadmap for increased electrification in federal fleets. The revisions recognize the diversity of use cases in the federal fleet and maximize electric drive choices to serve fleet needs in the light-, medium- and heavy-duty segments.

Subtitle D Part 2 requires the Secretary of Energy to pursue measures ensuring access and equity in electric transportation. As the Committee is aware, disadvantaged and front-line communities bear a disproportionate burden of pollution and its health and economic detriments. Comprehensive electrification legislation can address these disparities. EDTA supports the effort in HR 1512 and HR 1221, the *Electric Vehicles for Underserved Communities Act*, to assess needs and opportunities and to provide resources for technical assistance and project grants that will increase access to electric transportation and the benefits it provides to individuals and communities.

The grants provided in Subtitle D Part 3, to support mapping current and future Electric Vehicle Supply Equipment (EVSE) needs, are important to help accelerate the scaling electric transportation with informed investment. A comprehensive and consistently updated public database will help to ensure that the Department of Energy and the industry can make effective investments to meet current electric transportation infrastructure needs and plan for future ones.

EDTA supports investment in advanced manufacturing to create resilient supply chains, employment and U.S. leadership in the global market. As provided in Subtitle E and in HR 2308, the *ATVM Future Act*, updating the *Energy Policy Act* with explicit inclusion of "plug-in" technology and acceleration of domestic manufacturing of batteries and other technologies will focus resources on U.S. leadership in the global EV technology race. In addition, the expansion and updating of the ATVM program will enable this resource to be more effectively deployed to build U.S. manufacturing and employment and grow supply chain resilience.

HR 2852, the NO EXHAUST Act

EDTA applauds the leadership of Mr. Rush in the development of HR 2852, the NO EXHAUST Act, which was developed last year and serves as the basis of many of the electric drive provisions in the CLEAN Future Act. We are supportive of the bill's comprehensive investment in the electric drive transition, as described above.

HR 1221, the *Electric Vehicles for Underserved Communities Act of 2021*

As noted above, disadvantaged and front-line communities bear a disproportionate burden of pollution and its health and economic detriments. Representative Clarke's bill addresses the need to address these disparities and we support the effort in HR 1512, and in HR 1221, The Electric Vehicles for Underserved Communities Act, to provide resources for assessment, technical assistance and project grants for projects that advance access to electric transportation and the benefits that it provides, to individuals, communities and the nation.

HR 2308, the ATVM Future Act

As noted above, EDTA supports investment in advanced manufacturing to create resilient supply chains, employment and U.S. leadership in the global market. Subtitle E of HR 1512 and HR 2308, as introduced by Representative Dingell, will update the Energy Policy Act and accelerate domestic manufacturing of batteries and electric drive supply chain technologies. In addition, the expansion and updating of the ATVM program will enable this resource to be more effectively deployed to build U.S. manufacturing and employment, recognize the importance of mediumand heavy-duty vehicles, grow supply chain resilience and contribute to securing U.S. leadership in the global electric drive technology race. We appreciate Representative Dingell's leadership in ensuring not only that the future of transportation is electric, but also that the U.S. leads this transition in a way that benefits our economy and workers.

Conclusion

As the legislation under consideration recognizes, electric transportation is essential in addressing the climate crisis, advancing environmental justice and reducing health inequities. Building out an electric transportation sector will also grow employment and competitiveness. U.S. leadership in transportation electrification is vital to the creation of millions of good-paying American jobs and to our role in the global marketplace.

Simply, electrifying transportation is the choice to design a cleaner, smarter, fairer and more prosperous future. That does not, however, mean it will be simple to accomplish. We applaud the leadership of the Energy and Commerce Committee and appreciate the opportunity to work with you to ensure the success of this urgent and comprehensive effort.



EV Leadership: A 5-Year Policy Plan

The Electric Drive Transportation Association (EDTA), the collective voice of the entire EV value chain, believes that:

- Achieving net-zero emissions transportation for all Americans is a critically important goal that requires a comprehensive effort across multiple sectors of the economy to electrify transportation.
- ▶ U.S. leadership in this effort to electrify transportation will secure our economic future while driving innovation that reduces emissions, creates jobs and boosts investment opportunities in our communities and across all segments of the economy.
- ➤ To secure our leadership, the U.S. should implement an aggressive five-year plan that catalyzes growth with significant, long-term investments in market expansion and accelerates technology development and deployment for cross-sector adoption of e-mobility.

The federal policies detailed in this document can catalyze innovation and investment that will grow markets and supply chains, speed U.S. innovation and empower consumers with mobility choices.

Scale the passenger vehicle market

Accelerate commercial fleet adoption

Expand infrastructure to support local, regional and interstate charging and refueling options

Build a 21st century power grid to deliver an electrified transportation sector

Advance nextgeneration technology and the supply chain through research, development and deployment



SCALE THE PASSENGER VEHICLE MARKET

To accelerate the growth of the still-emerging market, federal policy should promote investment in electric transportation throughout the supply chain with consistent, long-term incentives for electric drive vehicles and infrastructure to enable the widest market participation by consumers and manufacturers.

EDTA recommends the following to achieve scale in the passenger vehicle market:

- ▶ Update the federal Sec. 30(D) plug-in electric drive vehicle credit with an increased cap on eligible vehicles and ensure that the credit continues to give consumers maximum vehicle choice and promotes investments by diverse industry entrants.
- Extend the Sec. 30(B) consumer credit for fuel cell vehicles for a period comparable to plug-in vehicles.
- ▶ Provide a long-term extension of the Sec. 30(C) credit for alternative fuel infrastructure, increasing the current cap to promote investment in advanced infrastructure options and ensuring accessibility and flexibility of payment methods at eligible facilities.
- Maintain regulatory incentives for electric vehicles in fuel economy and greenhouse gas standards to promote investment in advanced technologies that can provide the highest efficiency and emissions reductions benefits.
- Continue zero-emission treatment for battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs).
- Maintain compliance multipliers for these vehicles in any revision to the regulatory framework.
- ➤ Recognize the benefits of EVs and efficiency in any updated infrastructure funding mechanisms, including the Highway Trust Fund. Support a comprehensive update of the Highway Trust Fund that advances investment in 21st century infrastructure and does not penalize efficiency.
- ▶ Update federal authority to recognize technology advances and support access to High-Occupancy Vehicle lanes for electric drive vehicles. Public-private partnerships should maintain HOT/HOV treatment for advanced technology vehicles.



ACCELERATE COMMERCIAL FLEET ADOPTION

Fleets provide an immediate opportunity to move markets and reduce emissions in the transportation sector. Electrifying the federal fleet with electric drive light-, medium- and heavy-duty vehicles will save energy and operating expenses while growing American competitiveness in the global energy technology race. Support for state, local, utility and private fleet investment in electric drive vehicles and infrastructure will reinforce community and business efforts to improve air quality and services. Fleets will also be the proving ground for innovative mobility models, including car sharing and automated vehicles.

EDTA recommends the following to accelerate commercial fleet adoption:

- Expand the fuel diversity of the commercial fleet with restored incentives for medium- and heavy-duty electric drive vehicles; ensure incentives recognize next-generation costs and technologies for alternative fuel trucks and buses, including medium- and heavy-duty hybrid, plug-in and fuel cell vehicles.
- Provide resources for state rebate funds for purchases of both electric drive trucks and charging/refueling infrastructure at fleet depots in federal transportation programs.
- Expand Department of Transportation programs that support electric transit, including full funding for the Federal Transit Administration's Public Transportation Innovation program, which advances innovative public transportation projects through research, development, demonstration and deployment, and evaluation of technologies of national significance to public transportation.
- Grow the U.S. manufacturing base by reinvigorating the Advanced Technology Vehicles Manufacturing (ATVM) program with expanded eligibility for medium- and heavy-duty vehicle and component manufacturing facilities.
- ▶ Provide funds to manufacturing grant programs established in 42 USC 16062, and IRC Section 48C for advanced energy projects, to light-, medium- and heavy-duty vehicle manufacturers, and component manufacturers to encourage domestic production of electric drive vehicles and infrastructure.
- Update federal and state fleet requirements and expand incentives for fleet turnover.
- Expand the Department of Transportation's Low/No Emissions funding to accelerate electrification of transit; expand programs to accelerate new technology adoption in all medium- and heavy-duty vehicle fleets.
- Expand EPA's Diesel Emissions Reduction Act (DERA) program of grants, loans, and rebates for replacing and retrofitting diesel vehicles, to advance electric drive technology options in medium- and heavy-duty markets.
- ▶ Provide increased funding for the Clean School Buses Program, which will yield real-time public health benefits for children and communities while stimulating jobs and investment through the electric medium- and heavy-duty supply chain. Limits on grant amounts should be raised to accommodate the higher initial costs of the advanced technologies.
- Establish and expand fleet manager education and training initiatives; support education and assistance for installation of workplace infrastructure by private employers.



EXPAND INFRASTRUCTURE TO SUPPORT LOCAL, REGIONAL AND INTERSTATE CHARGING AND REFUELING OPTIONS

Rapid expansion of the electric drive fleet must be matched by expansion of infrastructure. We support the Administration's call for a comprehensive federal effort to accelerate build out of electric charging and hydrogen refueling options to meet the diverse needs of an evolving U.S. vehicle fleet. At the same time, we need to invest in efforts that speed installation of electric drive infrastructure that serves homes, workplaces and communities.

EDTA recommends the following to expand charging and refueling infrastructure:

- ➤ Establish a national infrastructure bank, or otherwise enable the financing of public-private partnerships through existing federal loan programs, such as Transportation Infrastructure Finance and Innovation Act (TIFIA), to support expansion of electric vehicle infrastructure, including DC fast charging and hydrogen refueling networks in diverse areas, including those that support seaports, inland ports and freight movement.
- ▶ Work with states and infrastructure stakeholder groups to advance alternative fuel corridor nominations and expand corridors overall.
- ➤ Provide a grant funding mechanism under the Department of Transportation's Alternative Fuel Corridors program to accelerate the installation of electric drive infrastructure along designated corridors and designated alternatives.
- ➤ Establish a rebate program to promote the purchase and installation of publicly accessible electric drive infrastructure in parking facilities, workplaces and multi-unit dwellings. Individuals, State, Local, Tribal, or Territorial governments, private entities and metropolitan planning organizations should be eligible for rebates.
- ▶ Reauthorize and increase funding for the Department of Energy's Clean Cities program.
- Expand funding and eligible program activities for the Congestion Mitigation and Air Quality Improvement (CMAQ) program.
- Provide federal support for local, state, and regional infrastructure planning collaborations.
- Allow greater access to federal lands, such as national parks, for charging and refueling infrastructure.



BUILD A 21ST CENTURY POWER GRID TO DELIVER AN ELECTRIFIED TRANSPORTATION SECTOR

An electrified transportation sector will also provide benefits to the power sector if we plan for the emerging opportunities to manage load and demand. Policies to make the energy grid stronger, smarter, cleaner, and more secure will enhance customer experience, while maximizing system benefits and supporting expansion of electric transportation.

EDTA recommends the following to modernize the grid and build out an integrated electric drive ecosystem:

- Increase collaboration among stakeholders, including electric utilities, labor, hydrogen producers and distributors, vehicle manufacturers, charging infrastructure providers and communities, and infrastructure site hosts to expand charging and hydrogen fueling infrastructure at the state and local levels.
- Advance policies to accelerate investment in electric drive and hydrogen infrastructure to support light, medium- and heavy-duty vehicles.
- ► Fund grid research to optimize the connection between electric transportation and the power sector, including cyber and physical security, demand response and energy storage capabilities, vehicle-to-grid integration, secondary-use of batteries and hydrogen storage demonstrations with private partners.
- ▶ Promote a robust infrastructure market for vehicle manufacturers, electric utilities, equipment & service providers; support industries that ensure a consistent user experience, customer choice, and innovation.
- ➤ Secure EPA action on pending applications to the RFS's biogas-to-electricity pathway and issuance of electricity Renewable Identification Number (eRIN) credits associated with those applications.
- ➤ Work with the EPA's ENERGY STAR program to identify effective timing and scope of action on energy efficiency standards for electric vehicle supply equipment.
- ➤ Coordinate with building codes and LEED stakeholders to expand recognition of the benefits of electric drive infrastructure and promote its installation in new and existing buildings.
- Advance connection standardization and work with private standard setting organizations, such as the Society of Automotive Engineers (SAE), Institute of Electrical and Electronics Engineers (IEEE) and National Electrical Manufacturers Association (NEMA), to facilitate increased standardization, while preserving rights of innovation and competition in infrastructure development.



ADVANCE NEXT-GENERATION TECHNOLOGY AND THE SUPPLY CHAIN THROUGH RESEARCH, DEVELOPMENT AND DEPLOYMENT (RD&D)

U.S. leadership in electric transportation begins with innovation. The transition to e-mobility will include battery and fuel cell vehicle electrification, automation, and connectivity technologies – as well as the interconnected ecosystems of transportation, power and communications. Federal policy can promote and reward innovation with a long-term vision for e-mobility, accompanied by increased agency research funding, expanded demonstration and deployment initiatives to speed technology advances and public-private partnerships to bolster U.S. capacity to develop, build and deploy EV technologies.

EDTA recommends the following to speed innovation through the supply chain:

- ► Fund robust Department of Energy, Department of Defense and other agency research and development of battery, fuel cell and hybrid technologies.
- ► Increase emphasis on multi-level demonstration and deployment of light-, medium-, heavy-duty, and non-road vehicles, and secondary-use batteries.
- Expand ARPA-E and other public-private partnerships to develop pre-commercial breakthroughs and grow the U.S. lead in the global advanced transportation technology race.
- ▶ Support investment in advanced manufacturing facilities through Department of Energy Loan Programs.
- ▶ Use the federal government's purchase power to deploy fleets and develop microgrids that advance markets, community resilience and expand expertise in e-mobility.

With a comprehensive vision and an aggressive plan of action for e-mobility, the United States can secure leadership in the global race for electric drive technologies that are essential to achieving net-zero emissions.

The Electric Drive Transportation Association, whose members represent the entire value chain of the electric drive industry, looks forward to working with the new Administration and Congress to seize the opportunity to lead the world in e-mobility.

Working together, we can realize the essential economic, environmental and employment benefits that electrifying transportation will provide.



ABOUT EDTA

Mission

The Electric Drive Transportation Association (EDTA) is the trade association promoting battery, hybrid, plugin hybrid and fuel cell electric drive technologies and infrastructure. EDTA conducts public policy advocacy, education, industry networking, and conferences. EDTA's membership includes vehicle and component manufacturers, utilities, infrastructure providers and electric transportation stakeholders.

For more information about EDTA and our members, visit **ElectricDrive.org**. For information about owning and operating an electric vehicle, please visit **GoElectricDrive.org**.

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