May 9, 2022

Electrification Coalition Public Comment on the Multi-State Medium-and Heavy-Duty Zero-Emission Vehicle Action Plan

Thank you for the opportunity to provide comments on the Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan ('Action Plan'). The Electrification Coalition commends the work of NESCAUM and the MOU signatories for your leadership to expand of zero emissions vehicles in the U.S.

The Electrification Coalition is a non-profit, nonpartisan organization that is focused on accelerating transportation electrification through a combination of stakeholder engagement, technical support, direct implementation, and policy support to facilitate the deployment of electric vehicles (EVs) on a mass scale, to combat the national security, economic, and public health impacts associated with the nation's dependence on oil. The EC has direct experience working at the local, state, and federal levels that includes providing technical and program support for cities, states and businesses.

Over the last two years, the EC has built and implemented an increasingly robust strategy to accelerate EV action in five priority states (Nevada, North Carolina, Virginia, Pennsylvania, and Michigan) while also increasing our reach and impact through a growing network of cities, states, and private sector partners. The EC is also working to increase our impact in our current states while expanding efforts into new states including Florida, Georgia, Illinois, and other parts of the Southeast and Midwest.

We are pleased to submit the following recommendations to strengthen the impact and results of the MOU:

- **Section II Supporting a just and equitable transition to zero-emission trucks and buses**

The EC supports the importance of collaboration among a diverse set of stakeholders to jointly acplan for an effective, efficient and equitable transition to MHD ZEVs. We recommend that this Action Plan continue to evolve with updates provided to stakeholders throughout the implementation process. As the electric transportation sector quickly evolves, the Action Plan should also be adaptable to account for and evaluate changes in the medium- and heavy-duty sector and the unique needs of each state and community. We recommend that NESCAUM regularly, and proactively, engage with stakeholders on updates of the market, economic impacts, air quality, public health, and national security impacts.

Recognizing that beyond the clear economic benefits to local manufacturers and workers with the expansion of the market, state prioritization of MHD EV deployment and adoption will advance progress in meeting climate and decarbonization goals, support state energy independence, reduce threats to national and economic security, and improve air quality in communities that are most heavily burdened by pollution. Underserved or disadvantaged communities are disproportionately affected by transportation pollution as these communities are often located next to highways, leading to adverse health effects across the community. The greater deployment and access to EV charging stations in these communities can lead to increased adoption of MHD EVs in these areas when combined with other supportive policies, leading to reduced tailpipe pollution, improved air quality, and overall health benefits.

To support environmental justice communities and equity in the expansion of electrification, the Action Plan should prescribe examples of tools needed to identify areas affected by vehicle emissions/tailpipe pollution. For example, EPA has an EJScreen tool, an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. EJScreen users choose a geographic area and the tool provides demographic and environmental information for that area. On a state level, California has the CalEnviro Screen Tool that is used to help identify communities that are disproportionately burdened by multiple sources of pollution. These tools can help support prioritization of areas for action. In addition to the use of these tools, the Action Plan should encourage close coordination directly with these communities to ensure their needs and desires are also aligned with electrification needs and opportunities.

Drivers in rural communities, which make up roughly 20% of the U.S. population, typically drive longer distances than drivers in more urban environments. With greater access to charging stations, paired with improving battery technologies that enable a greater range that work in rural communities, an increase in MHD EV adoption across rural communities is expected. The Electrification Coalition recently released our EVs in Rural Communities guidebook, which outlines a suite of recommendations and resources to support the accelerate the adoption of EVs in rural communities. We recommend that NESCAUM consider the benefits to rural and disadvantaged communities through the two charging infrastructure programs in the Bipartisan Infrastructure Law. The Justice40 Initiative establishes a goal that at least 40% of the benefits of federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities. Through the discretionary grant funding for charging infrastructure, the federal government is also encouraging states to expand publicly available charging infrastructure in rural corridors and underserved or disadvantaged communities. These programs include significant outreach and public engagement with these communities to ensure that diverse views are heard and considered throughout the planning process and that the deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution of benefits and services.

- **Section III – Why EVs?**

Mass adoption of EVs is key to addressing our reliance on oil and the national security risks associated with an opaque oil market controlled by an international cartel. Given that oil currently powers 90% of our nation's transportation system, our overreliance on oil affects not only our national security, but our economic security as well. EVs are powered by electricity - which can improve our national security by decreasing our reliance on any one feedstock - and the growth of the EV industry means new jobs not only in the automotive sector, but also in the technology, innovation and electric sectors. EVs offer significant fuel cost savings and reduce maintenance costs to drivers, while also representing an opportunity to maintain U.S. global leadership in auto manufacturing. The auto sector currently supports 9.9 million jobs and generates nearly $1 trillion each year. Building, driving, and charging electric vehicles in the U.S. represents job opportunities across the entire EV supply chain.

We agree with NESCAUM that the transition to MHD ZEVs will benefit public health, jobs and the economy. In addition to decreasing our dependence on imported oil, EVs produce zero tailpipe emissions, improving local air quality and public health. Improving air quality is especially important in communities that have been historically disproportionately impacted by poor air quality as a result of transportation and other sector emissions. Predominately, the communities most impacted by poor air quality are communities of color and low-income communities.

- **Section IV The developing zero-emission truck and bus market**

We agree that the shift to MHD ZEV's is accelerating through improved technology, private sector investment, opportunities to capitalize in the competing global market, and meeting federal and state climate goals.

Most automakers are already committing to full electrification of their product lines, releasing new electric models, and investing in electric vehicle manufacturing in the U.S. The following automakers have made significant commitments to EV production, job creation, and transition to EV sales:

- The Tesla Gigafactory, located outside Sparks, Nevada, became the highest-volume battery factory in the world in 2018. At peak production, the Gigafactory will employ 6,500 people and eventually as many as 10,000 employees.
- Volvo North America is producing its VNR Electric Class 8 truck at its plant in Dublin, Va., and the company aims for its product range to be "fossil free" by 2040.
- Ford has committed to invest $22 billion in EVs through 2025, invested $700 million in its Rouge Center to build the electric F-150, and committed to becoming carbon neutral by 2050.
- GM has committed $27 billion to electrification, with a goal of ending production of vehicles with internal combustion engines by 2035. The company is investing $3 billion to produce all-electric trucks, SUVs, and electric self-driving vehicles at its Hamtramck, Michigan, plant. When the plant is fully operational, GM projects it will create 2,200 manufacturing jobs.
- Arrival, a global EV manufacturer, is establishing its North American headquarters in North Carolina and will build its second American "micro factory" there.
- New, EV-only OEMs, like Lucid, Rivian, VinFast, continue to develop and expand their capacity to bring more and new vehicles to market.

A study from the National Renewable Energy Laboratory found that as improvements to electric vehicle technologies continue, medium- and heavy-duty vehicle classes will reach total cost parity with conventional diesel vehicles by 2035. Additionally, a study from ICCT, showed that the financial benefits of transition to MHD ZEVS will be significant, and that a number of depot-charging electric truck applications will be cost-competitive with diesel in the near future.

The federal government has renewed its focus on electrifying transportation through the Bipartisan Infrastructure Law (BIL) which will provide a significant opportunity to assist in the transition to MHD ZEVs. The BIL includes a down payment of more than $15 billion for EVs, electric vehicle support equipment, EV charging infrastructure, and battery processing and manufacturing for EVs. The BIL will also help solve one of the main barriers to higher medium- and heavy-duty EV adoption—EV charging infrastructure. The EV provisions will go far in making future charging infrastructure investments more inclusive to all EV types, including medium- and heavy-duty vehicles. Funding that will directly impact the MHD ZEV market:

- $7.5 billion for EV infrastructure to build a national network of EV chargers along highways, rural, and disadvantaged communities
- $7.5 billion for medium- and heavy-duty EVs like electric school buses and electric transit buses

- **Section V Sector-wide opportunities**

We agree with NESCAUM on the trends and barriers to future adoption outlined in this section. EC believes it is of critical importance to develop domestic supply chains and a broad minerals-to-markets strategy amongst our allies to insulate us from overreliance on foreign countries which do not share our same values and interests. A recent report by our sister organization, SAFE, reports on China's dominance across the EV supply chain and the importance for greater inter-dependence for ourselves and our allies. We recommend including figures included in the report, and the recommendations federal and state policymakers can consider to addressing our reliance on China.

- **Section VI Strategies for state policymakers and key partners to support the rapid, equitable, and widespread deployment of MHD ZEVs**

We agree that broad transportation planning is needed in developing an electrification strategic plan. We support a long-term vision of the statewide transit electrification plan. With the right policies, the transition to MHD ZEV sector creates opportunities for job creation and economic growth.

Some helpful resources and additional recommendations include the following:

- The EC, along with Forth, Plug-In America, and Sierra Club, also regularly compile the top MHD EV policies, programs, and incentives from state and local governments in the AchiEVe Toolkit.
- The EC has created a Policy Dashboard, which is an interactive map that consists of major state Medium and heavy-duty EV policies and incentives
- We agree that states should adopt purchase and reporting requirements for public fleets, including EV First purchase policies, as well as a total cost of ownership analysis for their vehicle replacement schedules. Fleets should be encouraged to take advantage of existing tools to analyze their replacement schedules and the opportunity for savings by purchasing market-available EVs. The EC has created the Dashboard for Rapid Vehicle Electrification (DRVE) Tool, which allows fleets to easily import their VINs and other drive cycle data to identify vehicles in their fleet that would result in total cost of ownership savings.
- States should prioritize any remaining funds from the Volkswagen Settlement solely for replacements with EVs and EV charging infrastructure.
- Additionally, we encourage scrappage requirements to eliminate the possibility of older, emitting diesel engines to continue operating and perpetuate dirty emissions. Appendix D-2 of the Volkswagen Settlement, US EPA Diesel Emission Reduction Act, and other similar federal funded incentive programs are examples of guidance for scrappage requirements and reporting. It is important to consider stringent requirements for scrappage, to ensure that fleets are pursuing ZEVs and to not continue to procure new diesel trucks. The best incentive programs decouple scrappage requirements from procurement incentives, and instead put in place separate programs for each. There are many private companies, such as those that do not own their vehicles or mandate short vehicle replacement cycles and have relatively new vehicles in operation, that often cannot meet the scrappage requirements required to receive vehicle purchase incentives and are thereby ineligible.
- Utility regulators should also require utilities to consider transportation electrification planning as a part of their integrated resource plans.
- Often, a major challenge in the adoption of EVs is the high upfront cost. While EVs are cheaper over the lifetime of the vehicle, fleets can encounter hurdles with shifting the savings in under their operation and maintenance budget lines to their capital expenditures. Fleets should

investigate innovative ways to combine their CapEx and OpEx budgets to more easily fund new projects and realize the savings from EVs.

- We agree that states need to adopt a "whole-of-government" approach. California Governor's Office of Business and Economic Development's report on California Zero-Emissions Vehicle Market Strategy is an excellent resource which identifies the roles and responsibilities each state agency has in accelerating the transition.
- EC echoes the value of planning for the deployment of public charging network, and emphasizes the importance of inter-state/regional cooperation to ensuring a comprehensive network without gaps along major corridors as they cross state lines.
- Currently, many manufacturers of MHD EVs are limited in the ability to sell and provide service to customers in many states. Auto dealership franchise laws currently prevent manufacturers - including new EV-Only manufacturers, which do not have pre-existing franchise relationships - from selling and/or servicing their vehicles directly to customers. Changes in these laws are needed to enable new market entrants to rapidly deploy new EV models and serve customers. The Electrification Coalition offers more information on the importance of direct-to-consumer sales channels here.
- We agree that the state should set annual reporting requirements for publicly owned, controlled, and contracted fleets designed to achieve 100 percent zero-emission MHD fleet vehicle purchases where technically feasible.

The following should be considered for reporting requirements:

- Electricity rates
- The cost savings from fuel and maintenance
- Total cost of ownership (TCO) comparison with diesel or gas vehicles
- Average daily driving routes
- Vehicle options considered for deployment
- Critical stakeholders and engagements for project success, such as utilities, vehicle manufacturers, facility managers, and other partners
- Barriers or decision points and how they were overcome/arrived at a solution
- Total emissions reduction
- Vehicle miles traveled (VMT)
- Utility involvement (demand charges, time-of-use, rates)

The EC supports NESCAUM's recommendations to:

- Support incentives, utility investments and state targets that will accelerate the electrification of trucks that travel along our highways and through our neighborhoods to deliver goods to our homes and businesses
- Electrify public transit and school buses to provide clean, healthy ways for residents to travel to and from school, work, and home.
- Invest in the development of MHD charging infrastructure to ensure that states do not miss out on the economic opportunities afforded by the electrification of transportation.

➢ **Appendix A Recommendations for local and U.S. federal government policymakers to accelerate the transition to MHD ZEVs.**

We agree the importance of additional efforts from local and federal government policymakers. For local policies, we would like to flag our recently release resource, "Electrifying Transportation in Municipalities: A Policy Toolkit for EV Deployment and Adoption at the Local Level," which supports local policymakers and advocates in identifying the top transportation electrification policies that localities should consider.

We thank you for the opportunity to provide comments and we look forward to working with you. For further information, please contact Anne Blair, Director of Policy, at ablair@electrificationcoalition.org