

**Written Statement of Katherine Stainken
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**Senate Environment & Public Works Committee
“Promoting American Energy Security by Facilitating Investments and Innovation in Climate Solutions”
March 23, 2022**

Chairman Carper, Ranking Member Capito, and Distinguished Members of the Committee,

Thank you for the opportunity to testify this morning. My name is Katherine Stainken, and I am the Vice-President of Policy at the Electrification Coalition. The Electrification Coalition is a nationally recognized non-partisan, non-profit 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 twenty-five leadership cities for the Bloomberg Philanthropies funded American Cities Climate Challenge; acting as the lead implementation partner for the USDOT’s Smart City Challenge; creating a nation-wide aggregated purchasing model¹ ; coordinating over 30 leadership business through the Electrification Coalition Business Council; working with household brands like Nestle to pilot freight electrification; developing fleet electrification roadmaps for the U.S. Virgin Islands; and working directly with states around the country to provide technical and policy support.

The Electrification Coalition is a sister organization of SAFE. SAFE is a nonpartisan, nonprofit organization committed to strengthening U.S. energy, economic, and national security by advancing transformative transportation and mobility technologies, and ensuring that the U.S. secures key aspects of the technology supply chain to achieve and maintain our strategic advantage. The SAFE Critical Minerals Center works to ensure responsible supplies of minerals and metals – from mining and processing to manufacturing and recycling – to lead the clean energy transition and bolster U.S. national and economic security.

The EC is also aided in our work by the Energy Security Leadership Council (ESLC), formed in 2006, which is a group of non-partisan senior business executives and retired 4-star Admirals and Generals, who find common purpose in the need to safeguard our EV and related supply chains as an economic and national security priority. This group is co-chaired by Adam Goldstein, Former Vice Chairman, Royal Caribbean Cruise Lines and General James T. Conway, the 34th Commandant of the U.S. Marine Corps.

¹ www.driveevfleets.org

The Intersection of Opportunities Given our Nation's Challenges

We are at the intersection of multiple opportunities as a result of the challenges facing our nation today. The U.S. transportation sector's overwhelming dependence on volatile global oil markets – and the unreliable actors who influence them – is a direct threat to the interests of the U.S. and our allies. While oil has facilitated the rise of the modern era, our over reliance on it creates tremendous energy security vulnerabilities because the price of this critical commodity is subject to manipulations by the OPEC+ cartel and global events that are beyond our control—such as those we are experiencing today due to the crisis in Ukraine. Such manipulations constrain U.S. foreign policymaking, affect the flexibility and activities of the military, impact consumers at the pump and threaten economic growth.

In addition to our national security challenges, we also face the rapidly growing threat of climate change. The latest National Climate Assessment², which Congress mandated in 1990 under the Global Change Research Act, shows that the U.S. has been observing the impacts of climate change for decades and that more frequent and extreme weather and climate-related events are creating new and increasing risks across U.S. communities – which we have recently seen with wildfires that have ravaged the country, more powerful hurricanes causing loss of lives and immense destruction, more intense tornadoes destroying communities, and extreme weather events in areas that we should not expect to see these weather events in.

Finally, our nation faces the challenge of constraints along the supply chain for many areas of our economy. This includes the supply chains for the future global transportation industry, from mineral extraction and processing, to EV battery and motor production, development of autonomous vehicles and 5G technology on which cars will communicate, the design and assembly of EVs, and the deployment of charging infrastructure and battery storage. The global pandemic has highlighted even more intensely how our economy and the goods and products Americans rely on are very much linked to our allies and in some cases, countries those who do not support American values.

Transportation Electrification Across All Market Segments is Critically Needed

The electrification of our transportation sector across all market segments is critically needed to address all of these challenges: our national security, climate change, and supply chain constraints. Widespread adoption of EVs is the best scalable strategy to loosen oil's grip on our national security and our long-term economic prosperity. This will be achieved through policies designed to accelerate adoption of EVs for all sectors, enabling a new era of American mobility, powered by electricity generated from domestic sources that are readily available, cleaner and stably priced. This brings a myriad of benefits, as domestic and localized electricity production unquestionably benefits local economies while creating jobs for

² <https://nca2018.globalchange.gov/>

American workers. In addition, the vast majority of EVs are charged overnight when the grid has the largest amount of spare capacity, helping to reduce the overall cost of providing electricity to all customers. Price signals can also be set that encourage EV charging during off-peak hours. Electricity offers the flexibility to power our transportation with the cheapest and cleanest resources available. Fully electric vehicles have zero tailpipe emissions, leading to reduced carbon emissions from the transportation sector. This has huge implications, as the carbon emissions from the transportation sector currently are 29% of the emissions in the U.S.³ This is true even with today’s mix of electricity-generating resources in the US—which will only get cleaner as alternative generation options are integrated into the grid.

The mass adoption of EVs across all market segments also provides the opportunity to address supply chain issues for critical minerals, used in multiple products that drive our economy – not just in the batteries used to power EVs. We have the opportunity to ensure U.S. competitiveness over the long term, as China currently controls 50-90% of mineral processing, which is the step needed to take mined material and turn it into useable compounds and goods, depending on the commodity.⁴

American Leadership and Global Competitiveness are at Stake

Our global competitiveness is at stake with the transition to transportation electrification. Domestic manufacturing jobs are at stake – and the right policies and signals will determine if these jobs end up in the U.S. or overseas. Developing a globally competitive automotive industry provides significant economy-wide benefits because it requires large-scale component manufacturing facilities, utilization of a wide array of raw materials and other services, investment in research and development, and support for both direct and indirect jobs. For example, automakers are among the largest purchasers of commodities such as aluminum, copper, plastics, rubber, steel, and computer chips, all of which support other major domestic industries. Yet we stand to lose all this if we do not fully commit to getting off oil in the transportation sector and pivoting to transportation electrification.

American leadership is at stake with this transition to transportation electrification. The U.S. must choose to capitalize on this EV moment through increased investments and policies that support the expansion of EV manufacturing, or we risk allowing allow other countries who are moving aggressively forward with policies that support EVs to take the lead. Since 2009, China has already invested roughly \$60 billion to support its EV industry⁵, and is expected to have 57% market share in 2030.⁶

Bipartisan Leadership is Needed to Advance Solutions

³ <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

⁴ <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>

⁵ Scott Kennedy and Mingda Qui, “China’s Expensive Gamble on New-Energy Vehicles,” Center for Strategic and International Studies, November 6, 2018.

⁶ IEA, *Electric Vehicle Outlook 2019*, May 2019.

To do this, we need bipartisan leadership to prioritize the adoption of smart and bold policies that accelerate our transition to transportation electrification. The Bipartisan Infrastructure Law (BIL) laid critical foundational policies and investments – the down payment – to our transportation electrification future. But now is the time for further action to enact policies that support transportation electrification and its supply chain, while expeditiously expanding the market. Combined with policies on the supply side, the United States will be positioned for success to ensure our national and economic security. We need specific policy solutions adopted today, and a long-term comprehensive strategy that charts the course for reliable and secure access to critical minerals, more jobs and a sustainable future. These policy solutions must be inclusive to support all modes of transportation.

We recognize that market-designed and market-driven approaches are the preferred method for overcoming economic challenges. But given the impact of oil dependence to our economy and the power that foreign governments wield over oil production levels, engagement by the U.S. government is warranted. Put simply, only government action can address a problem that is the creation of foreign governments.

Comprehensive Policy Solutions Needed to Accompany the Bipartisan Infrastructure Law

We applaud this committee and Congress for the work done in passing the BIL. The BIL provides \$5 billion in funding for the build-out of a nationwide EV charging network along highways, and \$2.5 billion in funding available through a competitive grant program for building out additional EV charging infrastructure, though all alternative fuels are eligible under this grant program. In addition, the BIL provides \$2.5 billion for transitioning the buses that take our children to school to be electric, with another \$2.5 billion available for all alternative fueled school buses, including electric ones. There is \$2.25 billion for funding that improves the resiliency of ports, including port electrification and the necessary charging infrastructure, along with any related grid upgrades. There is also \$250 million set aside for an electric or low-emitting ferry pilot program, \$20 million annually for grants for buses and bus facilities, expansion of the Carbon Reduction Program to reduce transportation emissions, research programs to evaluate new technologies, a \$5.5 billion expansion of the Low- and No-Emission Transit Vehicle Program to help state and local governments purchase U.S.-built electric transit buses, new dedicated grants for workforce training that helps protect and upskill transit workers, and expanded transit program funding that will be instrumental in reducing emissions in our communities and oil use in the transportation sector.

To meet the U.S. supply chain needs, the BIL begins to implement solutions that serve to shift our reliance on critical minerals away from countries like China and back towards the U.S. For example, the BIL provides \$6 billion in grants split between battery material processing grants, which are desperately needed, and battery manufacturing and recycling grants. The Earth Mapping Resources Initiative (Earth MRI) through the U.S. Geological Survey (USGS) was increased to \$64 million per year over 5 years so

that we can understand the critical mineral resources and reserves here in the U.S. These policies, combined with several actions taken by the Administration, have started to lay the groundwork for our transportation electrification future. These actions include standing up agency-level working groups within the Department of the Interior, Environmental Protection Agency, Department of Energy, Department of Commerce, and the State Department to tackle responsible mining practices, environmental and humanitarian standards, and clean energy. The DOI is leading an interagency working group on responsible mining; the EPA, DOE, and Commerce are working on international mining standards; the State Department is running a Clean Energy Resources Advisory Group that is focused on industry.

States are already taking action with the \$5 billion in funding available under the BIL to build out EV charging along our nation's highways. Many states are able to leverage this federal funding toward existing state efforts. Pennsylvania, through PennDOT, has started an interagency working group to identify the right alternative-fueled corridors to place the EV charging stations. They will soon launch an external stakeholder process to hear from stakeholders on how the state can best utilize the funding to meet the needs of PA EV drivers and the goals of the state that align with the Drive Electric PA Roadmap, which lays out strategies for expanding EV deployment – such as replacing 25% of the state fleet with EVs by 2025. In Florida, the state DOT has launched stakeholder engagement to build upon their Electric Vehicle Infrastructure Master Plan to align it with the opportunities of the BIL and build partnerships. In South Carolina, recent legislation established the Joint Committee on the Electrification of Transportation, and the state energy office is partnering with the Palmetto Clean Fuels Coalition and other state agencies to lead an EV stakeholder engagement initiative to advance EV deployment in the state. The state has also formed an advisory committee of state agencies, utilities, businesses, and others to guide the development of the statewide EV charging plan. North Dakota has already issued an RFP and is soliciting bids from firms to support the development of a statewide charging infrastructure plan pursuant to the funding available to them from the BIL. Other states have launched comprehensive processes in response to funding opportunities under the BIL. For example, North Dakota has already announced that their plan will include an EV vision and deployment goals for EVs in the state, stakeholder and public engagement, integration of EVs into the state fleet and public transit fleets, and plans for continued roadway funding – in addition to a statewide charging network. The reason North Dakota can undertake this comprehensive planning process is due, in large part, to the support and funding availability from the federal government. The EC is actively assisting states in utilizing the federal funding to achieve an effective, efficient, equitable and urgent deployment of EV charging infrastructure.

However, the work is just getting started. There are still a suite of specific policies needed today to accelerate our transportation electrification future. These policies can be categorized into four core pillars: vehicle incentives for passenger cars to semis, additional incentives for EV charging

infrastructure, funding to electrify the U.S. fleet, and incentives for U.S. manufacturing and the supply chain.

In terms of vehicle incentives, the Electrification Coalition supports tax credits for all vehicle types (light, medium, and heavy duty). These tax credits will continue to spur market growth by reducing the upfront cost of EVs as the price of batteries continues to decline and economies of scale are achieved, effectively lowering the upfront cost of EVs to be at price parity with their gas counterparts. These purchase incentives also provide critical signals to investors, manufacturers, consumers, and fleet operators that the U.S. is prioritizing an electric transportation future. Specifically, we support a multi-year extension of the Section 30D federal EV tax credit to work for more consumers for a longer period of time. The credit should be modified to be fully transferable, enabling a point-of-sale incentive and providing important clarity for consumers and sales staff, while increasing access for lower income consumers. Additionally, to ensure greater access for lower income consumers, the EC also supports a used EV tax credit. Finally, the EC also supports the creation of a new medium- and heavy duty (MHD) tax credit for EVs that covers up to 30% of the vehicle cost. The credit should be available for both individuals and businesses. With recent reports from the Bureau of Transportation Statistics estimating the value of freight shipments by trucks to double from 2018 to 2045 and that final-mile delivery will grow by 15% in the next four years⁷, the electrification of the MHD sector is particularly important, as these vehicles make up a quarter of all transportation emissions. These emissions lead to extremely poor air quality, especially in historically disadvantaged communities.

While historic investments for the build-out of EV charging infrastructure are being provided within the BIL, particularly within the competitive grant program, it does not provide enough of the needed incentives for certain market segments where EV charging infrastructure is needed. For example, additional infrastructure will need to be built at workplaces, at multi-unit dwellings and for fleets. The EC supports a multi-year extension of the Section 30C Alternative Fuel Vehicle Refueling Property Credit. We also support increasing the cap on the funding allowed per project, which is especially critical for accelerating commercial delivery electrification. While the BIL will provide important investments to build a nation-wide charging network, the EC also supports allowing EV charging stations to be defined as allowable commercial activity at rest stops along interstate highways. These policies will help expand the catalytic impact of the funding for EV charging infrastructure from the BIL and encourage additional investment from others in the public and private sector.

The U.S. must lead by example in this transition, which is why the EC also supports funding for electrifying the federal fleet, including the U.S. Postal Service (USPS). The federal government is the single-largest vehicle fleet operator in the country, with some 315,000 light-duty vehicles and buses, not including the USPS. An analysis from Atlas Public Policy and released by the EC on electrifying the federal

⁷ https://www.bts.gov/archive/publications/transportation_statistics_annual_report/2016/chapter_5

fleet showed that light-duty vehicles and buses in the federal fleet are a ripe opportunity for electrification, offering substantial cost savings. By 2025, federal fleets (excluding the USPS) could replace up to 40 percent of their buses and light-duty vehicles with EVs at a lower total cost of ownership (TCO) than comparable vehicles with internal combustion engines (ICEs). An additional 56 percent of these vehicles could be replaced with EVs at a TCO no greater than 14 percent higher than comparable ICE vehicles. The savings from the lower-TCO vehicles would offset the costs of the vehicles within 14 percent of TCO parity, allowing for 96 percent of vehicles to be electrified with no TCO penalty. By 2030, 97 percent of the conventional buses and light-duty vehicles in the federal fleet (excluding USPS) could be replaced by EVs, delivering considerable cost savings.⁸ Those savings would more than offset the costs of electrifying the remaining 3 percent of vehicles, allowing all vehicles to be electrified while still resulting in substantial cost savings. However, with gas prices the way they are as of today, the lower TCO can be achieved much sooner.

The USPS, which operates more vehicles than any other federal agency, offers an even more compelling case: by 2025, EVs are projected to be less expensive than conventional vehicles for more than 99 percent of the USPS light-duty fleet, with the potential to save \$2.9 billion. By 2030, that figure increases to nearly 100 percent, with the switch saving \$4.6 billion. USPS mail trucks (also known as Long Life Vehicles, or LLVs) alone would provide \$4.3 billion in savings if electrified by 2030.⁹ This fleet of 192,000 light-duty vehicles is especially well suited to electrification because the vehicles have predictable routes and schedules and existing centralized depots, where they could charge when not in operation.

While the current USPS plan calls for replacing only 10% of the current vehicles with EVs – and 90% with gas vehicles - Postmaster DeJoy has stated that his plan has flexibility to increase the number the EVs should additional funding become available. We specifically urge Congress to provide funding for the USPS fleet to go electric saving the agency money over the lifespan of the fleet.

To support manufacturing, Congress should look to substantially fund the Advanced Technology Vehicles Manufacturing (ATVM) incentive program and the Domestic Manufacturing Conversion grant program. Such funding would help companies across the entire advanced automotive supply chain retrofit existing auto manufacturing facilities for new technologies, and expand manufacturing capacity in the United States. Congress should also revisit the cap on ATVM grants, which is currently limited to 30 percent of the cost to re-equip, expand, or establish a facility. Elimination of the cap would ensure that the level of subsidy is sufficient to compete with the first mover advantage of Chinese manufacturing capacity, and to ensure that a boost in demand is accompanied by a boost in domestic supply, rather than by increased imports. Further, the eligibility criteria for the entire ATVM program (grants and loan guarantees) should be expanded to include medium- and heavy-duty EVs, and all of their associated

⁸ <https://atlaspolicy.com/federal-fleet-electrification-assessment/>

⁹ <https://atlaspolicy.com/federal-fleet-electrification-assessment/>

components. Congress should also revive the 48C Advanced Manufacturing Tax Credit. This tax credit, originally established under the American Recovery and Reinvestment Act of 2009, provided a 30 percent tax credit to re-equip, expand, or establish domestic clean energy manufacturing facilities. These policies will help to accelerate the transition, spur economic growth through investments in U.S. manufacturing, and help to ensure that we maintain our leadership in the global automotive sectors.

In order for the U.S. to gain reliable and secure access to the minerals needed for batteries that go into EVs, as well as other technologies, we need a range of actions to address our own domestic supplies. This includes bolstering midstream production, and creating a unified race to the top among like-minded nations.

Domestically, we need additional support to help expand domestic critical mineral processing and battery component production. This will help foster downstream investments within the supply chain and insulate our auto sector from supply disruptions. While the USGS, through the BIL and the Energy Act of 2020, maps mineral reserves and resources in the U.S., including from mine waste on abandoned mine lands, the U.S. currently has less than 4% of all minerals processing capacity.¹⁰ This means the majority of raw material that is mined here will have to be shipped somewhere else to be processed into useable compounds and materials. Subsequently, we also have zero plants that produce the cathodes and anodes needed for batteries. Alternatively, China controls 50-90% of minerals processing capacity for battery metals and produces more than 40% of the world's cathodes and 60% of the world's anodes.¹¹ By building processing plants here in an environmentally responsible manner and adhering to high environmental and labor standards when sourcing mined materials, we can incentivize critical minerals extracted from our land to stay here in the U.S. and not be shipped to China only to be shipped back to the U.S. That would save costs immensely, reduce the environmental impacts, strengthen our supply chains, and spur important economic growth in the U.S. Additional R&D dollars that research the substitution of certain critical minerals used in batteries that are particularly vulnerable to supply disruption are also needed. For example, additional research to remove cobalt from battery chemistries, which has ties to child labor and for which the U.S. has small reserves, is warranted. New battery chemistries are already coming online that use less cobalt, including 8-1-1 NMC batteries. Further advances in solid state, lithium-sulfur batteries, and more could further remove cobalt from battery chemistries.

To reduce the need for new mining, we should also establish robust recycling programs within the U.S. and among our allies and friends. While we cannot recycle our way out of the need for new materials in the short-term, but in the long-term, minerals are finite natural resources, and recycling should play a

¹⁰ <https://2uj256fs8px404p3p2l7nvkd-wpengine.netdna-ssl.com/wp-content/uploads/2020/09/The-Commanding-Heights-of-Global-Transportation.pdf>

¹¹ <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>; and <http://2uj256fs8px404p3p2l7nvkd-wpengine.netdna-ssl.com/wp-content/uploads/2020/09/The-Commanding-Heights-of-Global-Transportation.pdf>

role in helping the U.S. secure materials that it does not geologically possess. While the BIL does provide funding for battery recycling, more is needed to reduce the cost of transporting spent batteries to recycling facilities, which often accounts for the majority of the cost of recycling. This will help make recycled material cost competitive with virgin material. Additionally, more research into materials processing will make recycling batteries cleaner and more energy efficient.

However, new investments must also be made in responsible domestic production. While recycling is critically important, we do not yet have enough material in circulation today to meet demand through 2050. While the U.S. does not have enough supply geologically to do everything on its own, we do possess robust reserves of much needed commodities like lithium, copper, and even modest supplies of nickel. To help ensure responsible production at home, the U.S. should consider amending its Environmental Impact Assessment to include a social component. For example, Canada requires an Environmental and Social Impact Assessment that helps companies pave the way for more productive relationships with affected communities. Finally, the U.S. needs to work cooperatively with our allies to adopt a clean product standard that would ensure the critical minerals sourced from other nations adhere to proper environmental and labor standards and to help counter anti-competitive market practices from the Chinese Communist Party. This will help level the global playing field and create a new race to the top among nations to secure responsible minerals for the energy future. The U.S. should adopt policies to lower the cost of the battery while ensuring they are still meeting high environmental and labor standards. These policies could include trade deals among like-minded nations, amending Section 1502 of the Dodd-Frank Act to include disclosure for battery metals, and traceability requirements.¹²

Federal Policy Solutions Accompany State and City Level Action

The policies and investment adopted at the federal level set the course for further action and investment at the state and city level, and serve to complement existing EV policies and investment. The EC has extensive experience in working with states and cities in adopting the best practice policies that drive EV adoption. The EC State Accelerator Program focuses on driving policy adoption at the state level in MI, NV, NC, VA and PA, with our efforts expanding to also include GA, FL, IL, WI, IN and OH. EV adoption is growing across the political spectrum as bipartisan policy collaboration expands to support policies at the state and regional level. States across the country, driven by the need to reduce oil dependency, reduce carbon emissions and improve air quality, are establishing ambitious commitments to the policies and actions needed to accelerate transportation electrification.

One example to note is the state of Michigan, which just released their “Michigan Healthy Climate Plan”, which demonstrates the state’s commitment to a transportation electrification future by recommending to build the charging infrastructure to support 2 million EVs on Michigan roads by 2030, which includes

¹² <https://www.worldbank.org/en/topic/extractiveindustries/brief/climate-smart-mining-minerals-for-climate-action>

at least 50% of light-duty vehicle sales, 30% of medium- and heavy-duty vehicles sales, and 100% of public transit vehicles and school buses sold that year.¹³

States are increasingly adopting policies to accelerate the growth of the MHD EV sector. There are 16 states - California, Connecticut, Colorado, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Virginia, Vermont, and Washington – plus the District of Columbia that have all committed to work collaboratively to advance and accelerate the market for MHD EVs, with the goal of ensuring that 100 percent of all new MHD vehicle sales be zero emission vehicles by 2050 with an interim target of 30 percent zero-emission vehicle sales by 2030. These states and D.C. have signed on to a joint memorandum of understanding (MOU). Similarly, Oregon, Washington, New York, New Jersey and Massachusetts have followed California in approving the Advanced Clean Truck (ACT) rule, requiring a growing percentage of all MHD vehicles sold in the state to be zero-emission starting in 2025. Manufacturers must increase their zero-emission truck sales in those states to 30% to 50% by 2030, and 40% to 75% by 2035. Other states such as Colorado are in the process of adopting the ACT rule.

Some states have adopted purchase incentives for the EVs, others have adopted policies that drive the build-out of charging infrastructure, others have passed policies that require utilities to start planning for the adoption of EVs. These state-based policies will support all consumers, including the ones in rural locations and those who are low-income and/or underserved.

Cities, serving as the labs of innovation, have been early leaders in driving the policies and actions that support EV adoption and are excited about the partnership and support coming from the federal level to push forward with their EV and sustainability goals. To name a few examples of city level action, Charlotte, North Carolina has set an ambitious goal of 100% fleet electrification by 2030. To achieve this goal the City adopted an innovative fleet procurement policy in 2020 that standardizes the procurement of EVs through the use of total cost of ownership analysis. This policy was developed in conjunction with the EC and is serving to increase the speed at which internal combustion vehicles are phased out of the City fleet. Policies like this are being implemented in cities across the country with the EC's support. To facilitate the increased speed of electrification, installation of an additional 50 level 2 charging ports and a DC fast charging station is underway in a city owned parking deck. These stations will be dedicated to charging city owned fleet vehicles and will be made available to employees when not in use by the fleet. Furthermore, Charlotte Area Transit System has already taken delivery of the first 5 of a total 18 battery electric transit buses that will be in service by the end of 2022. Installation of charging stations is underway at the first transit depot that will provide electricity to these buses. These first 18 buses are a major step towards the eventual complete electrification of the CATS bus fleet. In addition to the

¹³ https://www.michigan.gov/documents/egle/Draft-MI-Healthy-Climate-Plan_745872_7.pdf

electrification of the entire transit bus fleet, medium and light duty support vehicles will also be electric and, using data analytics, EV purchases are underway.

Beyond North Carolina, in 2021 with guidance from the EC, the City of Orlando, Florida passed and implemented an EV Readiness Policy. This will guarantee new developments and substantial enlargement of structures will be “EV Ready” and compliant. To ensure successful implementation of this new ordinance, the EC worked with City staff to create a detailed EV Readiness Guide for residents and businesses, alongside a streamline of the City’s permitting website to help move EVSE projects faster. Orlando has also formed four E-Mobility Taskforce working groups with partners to accelerate EV adoption, develop a robust charging ecosystem, advance multi-modal EV solutions, and build equitable and affordable access to E-mobility. These examples of city level EV policy adoption and investment are just a few of the hundreds of examples.

Conclusion

Regardless of political or technological views on EVs, other nations -especially China - have continued to demonstrate a growing commitment to transportation electrification. Without aggressive action, the U.S. risks significant job loss by ceding on advanced technology and auto manufacturing. Should the U.S. continue to remain on the sidelines and not develop a comprehensive long-term strategy with robust demand-side and supply-side policies, the U.S. will experience a severe degradation of our U.S.-based innovation ecosystem—a system which catalyzes future economic growth and enables the U.S. to stay ahead in the technological, industrial, and military competition.

While oil has helped to facilitate the rise of the modern era, our reliance on it has also created tremendous vulnerabilities. So long as the cars and trucks that power our economy depend on oil as the single fuel source, the U.S. economy and our national security will be at the mercy of events and actors largely beyond our control. In addition, a transportation system powered by oil continues to contribute to U.S. carbon emissions and represents a continued threat to our public health, especially in historically disadvantaged communities.

The U.S. urgently needs a national strategic approach to our electric transportation future – from minerals to markets, to manufacturing and deployment. Unfortunately, electrification is often caught in partisan debates between climate change and free markets. It is time to put the interests of the nation first. By supporting the policies outlined in today’s testimony, we will accelerate our transportation electrification future powered by a fuel source that is secure, cleaner, cheaper, and domestically generated – and we will secure our economic and national security without ceding leadership to other countries.

On behalf of the EC, we thank you for the opportunity to provide testimony today. The EC looks forward to working with this Committee to take advantage of this intersection of opportunities and propel the U.S. into a transportation electrification future that secures American national and economic security.