



March 8, 2022

The Honorable Bobby L. Rush
Chairman
Subcommittee on Energy
House Energy & Commerce Committee
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Fred Upton
Ranking Member
Subcommittee on Energy
House Energy & Commerce Committee
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Rush and Ranking Member Upton,

On behalf of the American Chemistry Council (ACC), acting on behalf of its Plastics Division, I write today in regards to the Energy & Commerce Energy Subcommittee Hearing “Charging Forward: Securing American Manufacturing and Our EV Future” to highlight the role of ACC’s member companies in the manufacturing of plastics and polymer composite materials used to support deployment of electric vehicles (EVs) and EV charging equipment.

I. Background

The ACC is a national trade association representing U.S. companies that manufacture chemistry and plastics. ACC’s Plastics Division represents the leading producers of plastics resins in the United States, as well as foremost companies throughout the entire plastics value chain. American chemistry is an innovative \$486 billion enterprise that plays a critical role in delivering a more sustainable future through resource and fuel efficiency, material innovation, and continued advancements in our products and operations. Last year alone, America’s chemistry industry spent approximately \$10 billion in research and development to support innovation in a variety of fields, including energy, food, health and water.

The business of chemistry creates more than 529,000 U.S. manufacturing and high-tech jobs, and 4.1 million related jobs that support families and communities. This includes the manufacturing of lightweight plastics and polymer composites used by the transportation industry in automotive applications. Every day, plastics and polymer composites help deliver cleaner air and water, safer living conditions, efficient and affordable energy sources, lifesaving medical treatments and innovative lightweight vehicle solutions that enhance passenger safety.

Polymer composites are a combination of tough plastic resins that are reinforced with glass, carbon fibers and other materials. These materials often weigh far less than traditional automobile materials yet maintain high levels of strength and resistance to corrosion.



Lightweight plastic and polymer composites provide an economical way to sustainably lightweight vehicles while preserving important safety features and consumer preferences through improved design flexibility. Additional properties of plastic and composites, including strength to weight ratio and excellent energy absorption, make these materials especially well-suited for the design and manufacture of light-duty vehicles.

II. ACC Supports American Manufacturing in the EV Sector

Given the myriad applications of plastics and polymer composites in this infrastructure buildout to support increased deployment of electric vehicles, the development of EV technology will support high-skilled manufacturing jobs in the American manufacturing base, and specifically in the chemistry industry. ACC is supportive of DOT's implementation of the National Electric Vehicle Formula Program, Charging and Refueling Grant Program, and Surface Transportation Block Grant Program created and expanded by the IIJA.

The buildout of a national EV charging station will also create economic opportunity for Americans engaged in high-skilled manufacturing in the United States. Increasing demand for plastics and polymer composites for use in EV charging stations will support and grow the 529,000 manufacturing and high-tech jobs created by the U.S. chemistry industry. In addition, the advanced materials will help companies and the federal government meet net-zero emission commitments.

ACC encourages Congress and the Administration to rapidly deploy EV charging infrastructure across all geographies in the U.S., and encourages the Administration to pay particular attention to underserved areas, which are communities where federal assistance can make the most tangible difference for a sustainable EV infrastructure buildout.

ACC also encourages Congress to consider and prioritize the need for publicly available EV charging infrastructure in rural corridors and underserved and disadvantaged communities to ensure equitable deployment where possible. ACC supports federal and state level efforts to accelerate deployment of EV charging infrastructure along designated alternative fuel corridors as a means to accelerating overall market adoption of EVs, and as a stepping stone to more equitable development that covers all geographies across the U.S.

As the federal government implements the Infrastructure Investment and Jobs Act (IIJA), ACC believes the funds dedicated to build out a national network of EV charging stations will be critical to the transition to advanced propulsion vehicles and addressing issues related to "range anxiety" in rural corridors and underserved and disadvantaged communities. The conductive properties and durability of plastics and polymer composites make them highly regarded materials for housings in EV charging stations. Plastics can also be used for a huge array of



components within the larger structure of charging ports and EV stations. For example, they can be used in the production of charger housings, covers over front displays or touchscreens, lenses, connectors, light guides, and various other charging station components. There are also an array of plastics that are able to meet the demands of increasingly plentiful and sophisticated EV charging stations. Specifically, ABS, acrylic, fluoropolymers, nylon, HDPE, LDPE, PBT, polypropylene, and PVC all have several applications within the transportation industry.

Additionally, in regard to the long-term operation and maintenance of EV charging facilities, ACC encourages Congress and the Administration to consider the importance of circularity in its efforts to deploy increased infrastructure to support EVs. Circular design, including principles such as reusability, end-of-life recyclability, and modularity to ensure products can be easily repaired will help to ensure the longevity of this new infrastructure and return on the federal government's investment over time.

In this regard, ACC identifies our [*Transitioning toward a More Circular Economy for Automotive Plastics and Polymer Composites*](#)¹ Roadmap for consideration as a valuable resource in the Administration's planning. As circularity grows in importance, the plastics and polymer composites industry is committed to working together and with all material suppliers, part suppliers, and automakers to help the automotive industry transition toward a circular economy – including designing materials, products, and systems for disassembly, recovery, reuse, recycling and upcycling.

In addition, plastics will play a critical role in expanding our EV charging infrastructure nationwide. Advanced plastics provide multiple benefits to protect charging stations, including making them more resistant to dents, corrosion and inclement weather. This is important since charging stations are typically located outdoors and may be in isolated areas in order to establish a EV charging infrastructure across rural and underserved corridors. Durable plastics also can help prevent tampering or vandalism by providing tough casing for the charging port and charger cover.

ACC recently signed a five-year Memorandum of Understanding (MOU) with Oak Ridge National Lab (ORNL), to advance end-of-life and circularity solutions for durable automotive plastics. The partnership will bring together automotive OEMs, shredders, recyclers, researchers, and government to solve problems that will help the automotive industry, and other durable goods, advance end-of-life and circular economy solutions. The project will pursue a pilot-scale multi-material separation line that reclaims durable plastic through efficient sorting, separation, traditional and advanced recycling to make new high-performance plastics for reuse. Additionally, partners will seek to advance designing components for circularity from the start

¹ American Chemistry Council, “Transitioning toward a More Circular Economy for Automotive Plastics and Polymer Composites”, (October 2020), available at: https://www.automotiveplastics.com/wp-content/uploads/Transitioning-to-a-Circular-Economy_10-1-20_singlepage.pdf

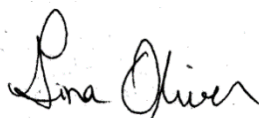


and evaluate whether the solutions developed can be applied to other industries beyond the automotive industry.²

III. Conclusion

ACC appreciates the Subcommittee's attention to the topic of EV deployment, and we look forward to supporting efforts to rapidly deploy EV charging infrastructure across the country. Specifically, we welcome the opportunity to serve as a resource for Subcommittee Members on issues related to materials science as this new wave of infrastructure is built out across the U.S.

Sincerely,



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cc: Chairman Frank Pallone, Jr.
Ranking Member Cathy McMorris Rodgers

²American Chemistry Council, "ACC and Oak Ridge National Lab Partner to Advance Durable Plastics' End-Of-Life & Circularity Solutions", (September 15, 2021), available at: <https://www.americanchemistry.com/chemistry-in-america/news-trends/press-release/2021/acc-and-oak-ridge-national-lab-partner-to-advance-durable-plastics-end-of-life-circularity-solutions>

