



July 25, 2025

Office of Energy Efficiency and Renewable Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585

RE: Request for Information on 2026 Energy Critical Materials Assessment

To Whom It May Concern:

Alliance for Automotive Innovation (“Auto Innovators”) submits these comments in response to the Request for Information from the Department of Energy (“Department”) to inform the 2026 Energy Critical Materials Assessment. We appreciate the opportunity to provide the auto industry’s perspective.

Auto Innovators represents the full auto industry, including the manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, semiconductor makers, technology companies, and autonomous vehicle developers. Our mission is to work with policymakers to realize a cleaner, safer, and smarter transportation future and to ensure a healthy and competitive auto industry that supports U.S. economic and national security. Representing approximately 5 percent of the country’s GDP, responsible for supporting nearly 10 million jobs, and driving \$1 trillion in annual economic activity, the automotive industry is the nation’s largest manufacturing sector.

We support the Department’s efforts to develop a 2026 Critical Materials Assessment. We also strongly support the Department’s decision to consider vehicles as part of the assessment of end-use technologies that contribute to energy conservation. Critical materials are increasingly important to the auto industry and to its ability to produce cutting-edge vehicle technologies, including energy-conserving technologies. There is no doubt that access to a trusted and resilient supply of these materials is essential to maintaining the global competitiveness of the auto industry in the U.S. and to maintaining our nation’s economic and national security. For this reason, we encourage the Department to pursue regular and structured engagement with the auto industry once the assessment is complete to ensure that it remains relevant and actionable.

Consumer demand continues to grow in the U.S. for vehicles with electrified powertrains. The market share of traditional internal combustion engines continues to decline, falling from approximately 86% in 2022 to approximately 76% in 2024. While the growth in pure battery electric vehicles has slowed over the last year, they still represent around 10% of new vehicle sales. In addition, the sale of traditional hybrid vehicles - which also require batteries - continues to grow rapidly. The total market share of traditional hybrid vehicles nearly doubled between 2022 and 2024 to nearly 14% of all new vehicles. These consumer purchasing trends clearly indicate a sustained need for critical battery materials.

To meet this growing consumer demand, there has been extraordinary growth in the production of batteries in the U.S. for electric motors. In 2020, there were just four facilities in the U.S. producing batteries. In 2025, there were eighteen U.S.-based facilities producing batteries. In fact, since the last Critical Materials Assessment was published two years ago, we've seen U.S.-based battery manufacturing grow by 119%. The continued availability of critical materials is essential to supporting production and the production-related jobs at these facilities.

In addition to critical minerals required for alternative powertrains, automotive technologies - including automated driving features, other artificial intelligence-enabled capabilities, and software-defined vehicle architectures - are all likely to increase automotive energy needs over the next decade and place additional demands on the supply of critical materials.

To inform the development of the Department's 2026 Critical Materials Assessment, we offer the following recommendations. Specifically, in the assessment, the Department should:

- consider a wide range of vehicle powertrains, including those that power battery electric vehicles, plug-in hybrid vehicles, traditional hybrid vehicles, fuel cell vehicles, internal combustion engine vehicles, and newer e-fuels vehicles;
- assess the material needs for the diversity of vehicle battery technologies, including lithium-ion, solid-state, sodium-ion, and next-generation batteries, as well as DC-to-DC converters, inverters, and traction motors;
- continue to assess materials captured in the 2023 Critical Materials Assessment, including light rare earth elements (including dysprosium, neodymium, terbium, and praseodymium), graphite, nickel, lithium, cobalt, copper, aluminum, manganese, silicon, magnesium, electrical steel and gallium remain as these are critical for EV drivetrains, magnets, lightweighting, and advanced electronics;
- reflect growing demand for phosphorous by the auto industry for lithium iron phosphate (LFP) batteries, which now account for 26% of total chemistry demand in the U.S., and assess supply risks as operating assets are nearing full capacity utilization and new capacity is not scheduled to come online for at least a few years;
- assign copper a higher importance rating to reflect its criticality to all energy projects;
- designate fluorine as a higher supply risk since the existing reserves for this material are expected to decrease by 2030 by around 30% as the reserves in China are depleted and new output from Mongolia and Mexico is not expected to compensate for supply losses from China;
- reevaluate the supply risk associated with manganese in the short-term since significant new manganese production will not become available in the U.S. for several years;

- consider adding scandium, germanium, and borates to the assessment as materials that are increasing in importance for vehicle-related items such as body components, lubricants, castings, headlights, and semiconductors;
- explore the addition of materials such as helium and high-purity gases that are used in battery and semiconductor manufacturing;
- track not only material types, but also specific grades and purities of critical materials required for vehicle-related uses and intensity of such material per vehicle;
- assign greater weight to substitutability and recycling in criticality metrics;
- explore expanding beyond the four demand scenarios included in the 2023 Critical Materials Assessment (i.e., low importance, high importance, low supply risk, and high supply risk) to also include worst-case supply risks for high importance materials; and
- assess availability in terms of mining, processing, and recycling.

In addition, to avoid confusion and to support industry planning, we urge closer alignment between the Department’s critical materials list and the Department of Interior’s critical minerals list. We also recommend that the Department consider public-facing web tools, dashboards, or regular briefings to effectively communicate changes and updates to the materials lists to the auto industry and other stakeholders.

Finally, we very much appreciate the Administration’s efforts to establish the U.S. as a leading producer and processor of critical minerals. President Trump’s March 20 Executive Order on “Immediate Measures to Increase American Mineral Production” and April 24 Executive Order on “Unleashing America’s Offshore Critical Minerals and Resources lay out a series of strong and overdue policies that, once fully implemented, will meaningfully increase critical mineral production in the U.S.

We commend the important actions that have already been taken to implement these orders, including the recent announcement between the Department of Defense and MP Materials to accelerate the build-out of an end-to-end U.S. rare earth magnet supply chain and reduce foreign dependency, and welcome federal support for additional critical minerals projects. As this important work moves forward, we urge the Department and the Administration to prioritize support for the mining, recycling, and processing of critical materials that are needed by the automotive industry. We also encourage the Administration to continue to pursue collaborative agreements and partnerships with allies, such as the Mineral Security Partnership, that are focused on securing resilient and diversified supply chains for critical minerals.

At the same time, the scale of capital and the lengthy timelines required for operational profitability for the mining and processing of critical minerals necessitates a multi-faceted policy

approach that also focuses on ensuring a steady demand for these minerals in the future. Given China's outsized competitiveness in this area, policies that stabilize and nurture future demand for these minerals can help minimize risks associated with investments in building out new domestic supply chains. For example, policies that support a competitive electric vehicle market in the U.S. can incentivize private sector companies to invest in the development of domestic supply chains for critical minerals that are used in electrified vehicles.

There is also no doubt that it will take time, significant capital resources, and close collaboration between industry and government to realize the full benefits of these crucial policies to increase the supply of critical materials. Until such time that these policies are fully implemented and producing their intended results, we strongly urge the Administration to refrain from implementing tariffs or other restrictive trade actions on critical minerals that could further constrain supplies and reduce the competitiveness of U.S.-based manufacturing operations relative to foreign producers in markets around the world.

Auto Innovators appreciates the opportunity to provide input into this important effort. We look forward to continued engagement on this and other matters.

Sincerely,

A handwritten signature in black ink, appearing to be 'Hilary M. Cain', with a long horizontal stroke extending to the right.

Hilary M. Cain
Senior Vice President of Policy