



**AUTO ALLIANCE**  

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**DRIVING INNOVATION®**

**STATEMENT**

**OF**

***THE ALLIANCE OF AUTOMOBILE MANUFACTURERS***

**BEFORE THE:**

**COMMITTEE ON ENERGY AND NATURAL RESOURCES  
U.S. SENATE**

**JANUARY 28, 2014**

**PRESENTED BY:**

Jennifer Thomas  
Director, Federal Government Affairs

Thank you, Chairman Wyden, Ranking Member Murkowski and members of the Committee. The Alliance of Automobile Manufacturers (Alliance) is a trade association of twelve car and light truck manufacturers comprised of BMW Group, Chrysler Group LLC, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche Cars, Toyota, Volkswagen Group and Volvo Cars. Together, Alliance members account for roughly three out of every four new vehicles sold in the U.S. each year. Auto manufacturing is a cornerstone of the U.S. economy, supporting eight million private-sector jobs, \$500 billion in annual compensation, and \$70 billion in personal income-tax revenues. On behalf of the Alliance, I appreciate the opportunity to offer our views on S. 1600, the Critical Minerals Policy Act of 2013, and the need for reliable and affordable access to the minerals that are vital to automobile production. We applaud the Committee for the thoughtful and bipartisan approach it has taken to address this important policy issue.

Today's automobile is among the most sophisticated technology owned by consumers. Not only is it advanced from electronics, computer and connectivity standpoints, but it must also be durable and reliable. An automobile must function consistently and well in the harshest climate conditions from freezing cold to desert heat, running on the roughest roads from urban potholes to unpaved country and off-road conditions, performing at highway speeds and in congested city streets for as much as a 150,000-mile lifetime, all while meeting thousands of regulatory requirements. Virtually every aspect of the modern automobile is now high-tech, uses advanced materials and is developed through cutting-edge processes. To keep pace with ever-growing consumer demands for sophisticated new technologies, Booz & Co. found auto industry R&D spending climbed from \$7.4 billion to \$102 billion in 2013. By comparison, the entire global aerospace and defense industry spent roughly \$25.5 billion in the same year.<sup>1</sup>

To meet the aggressive 54.5 miles per gallon (mpg) fleet fuel economy standards by model year (MY) 2025, automakers are fully engaged in further refining the production of vehicles and the implementation of advanced technologies – developing more hybrids, plug-in hybrids, battery electrics, fuel cell vehicles, more efficient power trains, and lighter vehicle bodies. This new generation of sophisticated, high-tech and fuel-efficient vehicles will be

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<sup>1</sup> Jaruzelski, B., Loehr, J., and Holman, R. *The Global Innovation 1000: Navigating the Digital Future*. Booz & Co. Issue 73. Winter 2013.

increasingly reliant on a variety of commodities, many of which appear to meet the bill's definition of a critical mineral. For example, various lighter-weight, high-strength steel alloys contain a variety of minerals, including molybdenum, chromium, nickel, and manganese, and are utilized to reduce vehicle weight while still maintaining the integrity of a vehicle. Platinum group metals (PGMs) are essential components of a vehicle's catalytic converter, significantly reducing carbon monoxide (CO), hydrocarbon (HC), and nitrogen oxide (NOx) emissions. Finally, rare earth magnets are used in the electric motors found in most hybrid and electric vehicles and in the nickel metal hydride batteries utilized in current generation hybrid electric vehicles. Some current and many future hybrid and electric vehicles are expected to utilize lithium ion batteries and while they do not contain rare earth elements (REEs), lithium ion batteries do contain minerals such as cobalt and manganese, in addition to lithium. Simply put, minerals are the building blocks of virtually every automobile on the road today. Ensuring affordable and reliable access to them is key to the continued success of the automotive sector.

Automobile manufacturing is among the most capital-intensive industries. Automakers and suppliers must make substantial investments at the front end on research, design, development, testing and certification before a vehicle enters production. New technologies carry significantly higher costs, at least initially, as they are developed and refined for use on the various types of vehicles needed by American consumers. Additionally, production cycles in the auto industry are five years or longer and not all vehicles are reengineered at the same time. This need for longer lead times requires increased transparency and certainty throughout the global supply chain. Any unexpected disruptions have the potential to result in significant economic harm.

We commend Senators Wyden and Murkowski for crafting comprehensive legislation that will help create a more secure domestic supply chain for critical minerals. According to the U.S. Geological Survey, U.S. manufacturers and others are more than 50 percent reliant on imports for more than three-dozen mineral commodities, including REEs, titanium, and cobalt. This dependency leaves U.S. industries susceptible to potential supply disruptions in producing countries as a result of natural disasters, political instability or market manipulation. The Critical Minerals Policy Act promotes policies to help ensure a robust and stable supply chain of domestically produced critical minerals and, thus, provides industries reliable and affordable access to critical minerals.

The Alliance supports the requirements outlined in Title I of the Critical Minerals Policy Act to establish a list of minerals critical to the U.S. economy. Following this designation, the legislation calls for an analytical and forecasting capability to be established to identify critical mineral supply and demand to ensure “informed actions be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts.” Every automaker maintains a process to manage risk throughout its vast global supplier network. The existence of impartial analysis and forecasting for critical minerals, similar to what the U.S. Energy Information Administration (EIA) produces for various energy sources, will help industry identify risks early and ultimately manage them.

Mineral-dependent industries must manage and mitigate risks of shortages or price spikes through a variety of means, including diversifying suppliers to the maximum extent possible, using minerals efficiently throughout the production process and establishing aggressive recycling programs to recapture supplies when vehicles are taken off the road. Automakers support the Department of Energy (DOE) R&D programs established in Sections 106 and 107 of Title I that would facilitate the efficient production, use, and recycling of critical minerals and identify and develop alternative materials that can be used to reduce the demand for critical minerals. Given the diversity of sectors potentially impacted by the availability of certain minerals, DOE is the right agency to coordinate with stakeholders in developing best practices and innovative approaches for using existing critical minerals efficiently and for introducing viable and affordable alternatives when necessary.

We appreciate the opportunity to offer our views on the Critical Minerals Policy Act and the need for a robust and stable critical minerals market. Whether it’s the aluminum in automotive frames, the platinum in catalytic converters, or the lithium and nickel in electric vehicle batteries, minerals are vital components in every automobile on the road today. This sensible, bipartisan legislation will help to ensure reliable and affordable domestic access to critical minerals, promote recycling, and identify and develop viable alternatives to reduce the demand for critical minerals. The Alliance stands ready to work with the Committee on this important energy and natural resources policy. Thank you again and I will be happy to answer any of your questions.