



**WRITTEN TESTIMONY BEFORE THE
COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES**

**HEARING ENTITLED
“Reforming the Mining Law of 1872”**

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Chairman Lowenthal, Chairman Grijalva, Ranking Member Stauber, and distinguished Members of the Subcommittee, thank you for the honor of appearing before you today for this important hearing to discuss ways modernize our domestic mining laws in the United States.

My name is James Chen and I am the Vice President of Public Policy and Chief Regulatory Counsel for Rivian Automotive, LLC.

Rivian Background

Founded in 2009, Rivian is an independent U.S. company focused on the mission to “Keep the World Adventurous Forever” through the design, development, manufacture and distribution of class leading all electric trucks and sport utility vehicles (“SUVs”). In 2017, the company acquired the former Mitsubishi production plant in the town of Normal, Illinois. Originally slated to be torn down and repurposed for mixed use residential and commercial, Rivian has invested nearly \$2 billion to revitalize the plant into a modern, high-tech manufacturing facility. Employing nearly 5,000 employees in direct manufacturing jobs, Rivian is now producing three all electric vehicle models in Normal: the R1T, pickup truck, the R1S full-size SUV, and a commercial delivery van for Amazon. The R1T, our flagship vehicle, is the first all-electric pickup available in the U.S. market and has won numerous awards and accolades, including being named MotorTrend’s 2022 Truck of the Year.

Following the successful debut of our three vehicles in 2021 and an Initial Public Offering (“IPO”) that same quarter that raised approximately \$12 billion, Rivian is now focused on ramping up production at our plant in Normal, Illinois, as well as beginning construction on a second domestic manufacturing site in Georgia. Rivian is also making significant investments into our next-generation vehicle platforms and in-vehicle technologies which include a range of new battery packs with new chemistries that are made with more common elements, greater efficiency, and are best suited for different types of vehicles and driving patterns.¹

Rivian was formed to help drive the transition to sustainable transportation and protect our planet

¹ [Rivian Q4 2021 Shareholder letter](#). Rivian, Mar. 10, 2022.



for future generations. Our mission to “Keep The World Adventurous Forever” extends beyond the impact of the products we build. Our goal is to lead the sustainable transformation of the automotive and energy sectors, and preserve natural ecosystems that provide the backbone for life on this planet. As such, we have committed to both decarbonizing our business and helping to protect critical natural carbon sinks—complementary and necessary work that is required to address the climate crisis.²

The battery is one of the most important components of an EV, and accounts for a vast majority of the EV supply chain. A battery’s raw materials, their processed derivatives, and the assembled cells themselves—still largely exists outside U.S. borders. With targeted policies, we believe this supply chain imbalance can be corrected and enable an accelerated transition to a carbon-neutral, circular economy that is far more sustainable in the long run than the fossil fuel, one-time-use combustion-based economy we still largely have today.

Rivian is doing its part to help create a strong, reliable, and transparent American battery supply chain, investing billions in manufacturing operations in Illinois and Georgia, working closely with domestic suppliers and others from allied nations, and investing early into in-house development of new battery technology. By modernizing its mining laws and securing its battery and EV supply chain, the United States has an opportunity to lead the world, ensuring the global mineral race does not become a race to the bottom.

For these reasons, we are encouraged by the discussion that this bill has sparked today. The Clean Energy Minerals Reform Act can help expand and accelerate domestic mineral development while also conforming to our bedrock environmental laws and protecting special places like our National Parks and Monuments.

This bill also recognizes the impacts to rural communities and tribal nations. A majority of U.S. nickel, lithium, copper and cobalt reserves are located on or near tribal land,³ so tribal consultation in the form of free prior and informed consent must be central to any update to our domestic mining laws.

EV Industry Outlook

The outlook for EVs is strong and positive. Demand for electric vehicles, particularly trucks, SUVs and delivery vans is increasing. For example, Rivian has pre-orders for approximately 80,000 R1T and R1S vehicles. Our contract with Amazon includes an order for 100,000 EDVs by 2030, the largest ever commercial fleet contract. Moreover, other fleet operators have expressed strong interest in all electric delivery vans as well. Demand is not an issue as we ramp up our production as quickly as possible.

The convergence of key trends, including shifting consumer preferences and targeted regulatory support, is contributing to the robust demand for Rivian products and services. EV adoption is accelerating as consumers and businesses better understand the benefits of EVs. Businesses, from

² [Rivian Comment to U.S. Department of Interior request for information on the American Conservation and Stewardship Atlas and America the Beautiful Initiative](#), US Federal Register, March 7, 2022.

³ [Mining Energy-Transition Metals: National Aims, Local Conflicts](#), MSCI ESG consulting, June 3, 2021.

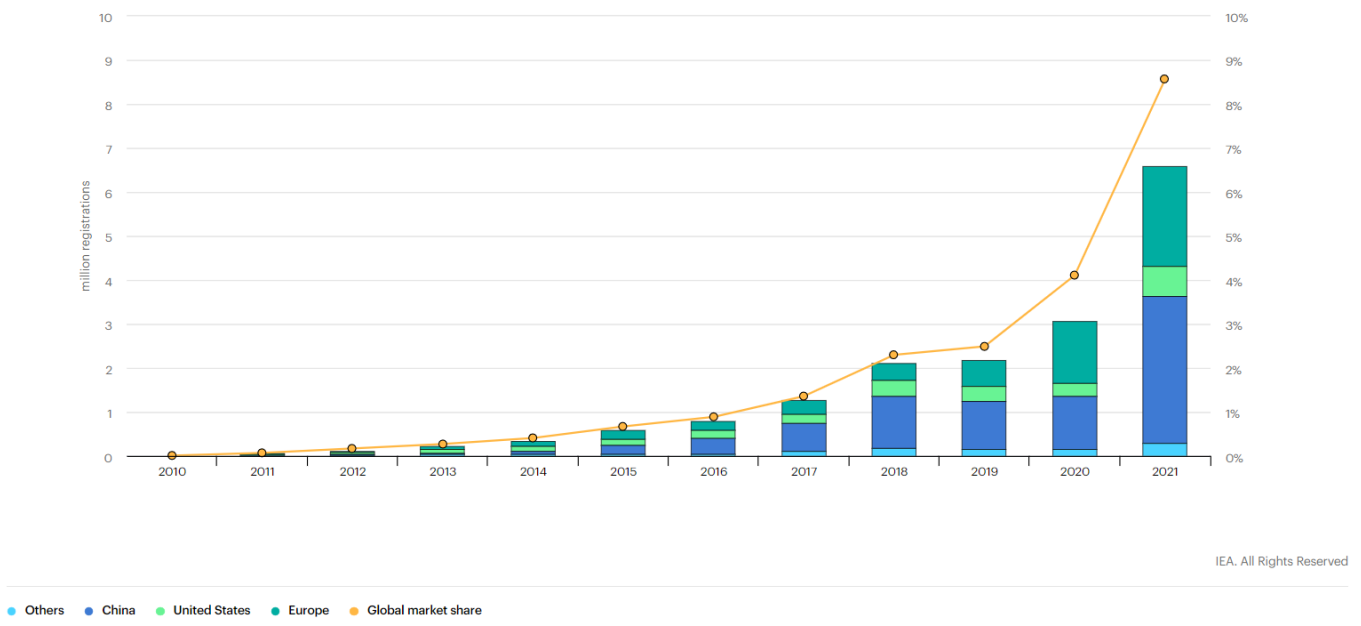


auto companies to the mining industry, are responding to this demand to develop sustainable solutions. As a brand built on sustainability, we aspire to develop strong working relationships with all our upstream suppliers, including mining companies.

Though EV adoption rates in the United States have nearly doubled over the past couple years,⁴ EVs still only comprised 3.4 percent of new auto sales in the U.S. 2021.⁵ Other countries, particularly in Europe and Asia, are seeing higher rates of EV adoption,⁶ and European and Asian auto manufacturers are quickly taking market share. The United States has always been a global automotive leader. Failure to employ a whole-of-government approach to securing a full domestic EV supply chain—from manufacturing to processing to extraction—risks ceding leadership to other nations. But as we did with oil in the 20th Century, we can lead on minerals in the 21st Century.

Global sales and sales market share of electric cars, 2010-2021

Open



Updating the 1872 Mining Law

As a Company that relies on the mining of critical minerals for our products, Rivian recognizes our business has an upstream impact on communities and ecosystems. As a result, we are actively seeking ways to minimize that impact wherever possible, while still leading in the areas of transportation and energy technology. We are also acutely aware of the fact that mineral

⁴ [New Plug-in Electric Vehicle Sales in the United States Nearly Doubled from 2020 to 2021](#), U.S. Department of Energy. Mar. 1, 2022.

⁵ [Electric vehicles and hybrids surpass 10% of U.S. light-duty vehicle sales](#), US Energy Information Administration. Feb. 9, 2022.

⁶ [Electric cars fend off supply challenges to more than double global sales](#), International Energy Administration. Jan. 30, 2022.

extraction needs to be placed in the context of local community well-being and ecosystem fragility and importance. Some places should have a level of permanent protection and specifically prohibit, or limit harmful extractive uses. Those decisions should be made within a modern framework.

Rivian supports updating our domestic mining law for the 21st Century. The planning, protection and consultation elements of this bill will allow the United States to expand and lead in mineral resource procurement while still adhering to our bedrock environmental laws and protecting America's special places. The United States has such strong environmental laws that we could have the cleanest and safest mines in the world.

We also recognize that domestic mineral development needs to accelerate in the near term, and that the mining sector remains concerned about potentially punitive gross royalties and permitting timelines. Permitting can be done in a more efficient and coordinated way within current frameworks and future conflicts and slowdowns could be avoided through thoughtful reform. We agree with mining industry calls to “focus on how to restore U.S. mining's competitiveness on the global stage, decrease our import reliance, and ensure that existing federal and state regulations are not duplicated.”⁷

We must also look for new and better ways to obtain critical minerals and rare earth elements. American ingenuity and innovation are already happening in this space (e.g., mineral coproduction from geothermal brine and rare earth element recovery from abandoned mines). Not only could these novel methods of mineral extraction create new economic opportunities across America, they can also help rectify the environmental legacies of mining in the 19th and 20th Centuries. Further consideration should be given to permitting around activity to reclaim rare earth elements and other minerals from brownfields and abandoned mines.

The federal government is making progress to address these issues in bipartisan fashion. The Biden Administration has taken early steps to address these issues, issuing Executive Orders to shore up our domestic supply chains and invoking the Defense Production Act for critical minerals. Rivian is a participant on the State Department's Clean Energy Resources Advisory Committee, an effort that has carried over from the previous Administration that we see as a signal of bipartisan support for securing mineral supplies beyond our borders.⁸ There is also a strong spirit of bipartisanship that helped push through the Infrastructure Investment and Jobs Act last year and the Energy Policy Act of 2020, bills that funding for mineral processing and battery manufacturing. We can build on this progress and further enhance domestic mineral security by modernizing the law that governs the highest reaches of the supply chain—extraction.

A balance needs to be struck between catalyzing domestic development in the near term and ensuring taxpayers, tribes and local communities will receive fair returns on minerals extracted from public lands around them. Ultimately, funds from the proceeds should be set aside for cleanup and conservation.

⁷ [White House push to reform mining law draws skepticism from opponents, advocates](#), S&P Global, Feb. 25, 2022.

⁸ [Inaugural Meeting of the Clean Energy Resources Advisory Committee](#), U.S. Department of State, Mar. 18, 2022.

This bill uses the oil and gas sector as a model, where domestic oil and gas developers adhere to a leasing and royalty system, and still have helped the United States become one of the largest producers in the world.⁹ Offshore oil royalties go into the Land and Water Conservation Fund, which has protected thousands of acres across the country and was recently permanently funded by a bipartisan act of Congress—the Great American Outdoors Act.¹⁰

Of course, the economics for oil and gas are different than mining, but other countries like Canada and Australia show what’s possible. These mineral-rich countries have robust mining sectors that exist within sophisticated royalty and permitting systems. Canadian and Australian mines generate billions in annual tax and royalty revenues for their governments each year,^{11,12} demonstrating that having modern mining laws does not hinder domestic mineral development.

The goal to strengthen our mineral supply chain by accelerating domestic extraction must also include expansion in our midstream capacity as well. Mineral recovery from abandoned mines could help provide early feedstock to get new domestic processing facilities while new mines come online. By ensuring that the processing and refining of the raw materials that get extracted also remains domestic, we will ensure supply chain security that would otherwise be vulnerable to foreign influence if domestically sourced minerals still needed to be shipped overseas for processing.

Greater United States Leadership is Needed

More than ever, the United States must lead in the area of new transportation technology. Lithium-ion battery technology was invented by U.S. physicist John Goodenough, now at the University of Texas, Austin. Modern use of this battery technology in cars was introduced by the founders of Tesla Motors, Inc., California-based company that proved that long-range, highway capable, battery electric vehicles were not only possible, but in many respects, superior to the incumbent technology of internal combustion engines in terms of performance, efficiency, and utility.

The United States simply cannot let this technology that was discovered and commercially proven here at home to be dominated by other countries. We have already seen the dangers of allowing foreign countries dominate an industry. For example, around 90 percent of rare earth minerals are produced exclusively in China. In the early part of this decade, China sent world markets roiling when it drastically reduced the allowed export of rare earth minerals. With rare earth minerals used in critical industries as computer memory, rechargeable batteries, cell phones, air pollution control, magnets, fluorescent lighting; and critical defense uses such as precision-guided weapons, night vision goggles, communications equipment, and GPS equipment, restriction of this resource was a substantial threat to the U.S.’ security and economy. Such foreign dominance cannot be allowed when it comes to new transportation technology.

⁹ [What countries are the top producers and consumers of oil?](#), U.S. Energy Information Administration, Dec. 8, 2021.

¹⁰ [About LWCF](#), LWCF Coalition.

¹¹ [Minerals and the economy](#), Government of Canada, Feb. 3, 2022.

¹² [Australian mining contributes record tax and royalty payments to fund better services and infrastructure](#), Minerals Council of Australia, May 17, 2021.

In addition to historically being a global leader in automotive manufacturing and EV technology, the United States is also a leader in environmental conservation. Our National Parks are often called “America’s Best Idea” and our bedrock environmental laws like the Clean Air Act, the Clean Water Act, the Endangered Species Act, and the National Environmental Policy Act set a high bar for environmental standards among nations.

The United States has the allies, resources, and industrial capability to create a robust domestic mineral supply chain, as well as high environmental standards to ensure it is built and operated ethically and responsibly.

Given the national, economic, and climate security risks associated with the current global mineral supply chain, the federal government must take an “all-of-the-above” approach. Updating our mining laws is one piece of that, but it must be complemented with a broader suite of domestic and international policy that would allow U.S. manufacturers to move fast in scaling up their production and securing their supply chains.

- **Accelerate EV Adoption.** Greater domestic demand for EVs will drive innovation and support domestic manufacturers’ efforts to onshore their supply chains. The federal consumer EV tax credit should be expanded without unnecessary limitations that hold American manufacturers back from advancing the technology. The federal government could also create exceptions to state dealership protection laws,¹³ which remain one of the biggest barriers to EV adoption in the US,¹⁴ and avoid setting punitive EV fees.
- **Deploy federal funding in a more targeted and efficient manner.** The DOE Advanced Technology Vehicle Manufacturing loan program is well funded and expanded in scope, but it comes with administrative burdens that discourage potential applicants. The program can strike a better balance between holding loan holders accountable and not being burdensome.
- **Shore up allies and create new ones.** The United States must leverage its massive diplomatic and trade potential to further open global supply chains for both raw materials and talent. The International Development Finance Corporation could better coordinate on securing mineral supply chains. The State Department can begin reinvigorating American diplomatic efforts in Asia, Africa, and South America.
- **Update laws that regulate battery waste.** As EVs proliferate on U.S. roads, they become a strategic reserve of minerals that can be collected and recycled later on. The more we recycle, the less we will need to rely on domestic extraction. Congress can set standards while also maintaining flexibilities to suit the needs of a broad range of battery types, sizes, weights, applications, and users. Federal action should ensure industry is not beset with multiple duplicative state programs and also involve waste management companies.
- **Streamline EV test procedures.** The Environmental Protection Agency (EPA) and U.S. Department of Transportation (DOT) could further streamline test procedures initially

¹³ [How China Beat the U.S. in Electric Vehicle Manufacturing](#), Issues in Science and Technology, Winter 2021.

¹⁴ [The Simplest Way to Sell More Electric Cars in America](#), The Atlantic, Jan. 21, 2022.



created for internal combustion engine vehicles. This could include broader groupings of EVs certified in the same test group to more use of modeling in range and consumption testing.

- **Streamline federal fleet requirements for EVs.** To purchase vehicles directly from a manufacturer, federal agency fleet managers must go through the General Services Administration (GSA) or else face burdensome paperwork. The federal fleet procurement process could be streamlined, either through GSA or allowing agencies to purchase directly from a manufacturer.
- **Accelerate visas for engineers who want to help build the EV industry here in the United States.** Rivian has brought together key talent from around the world, specializing in automotive and aerospace engineering, semiconductor design, consumer electronics, and cloud software. The federal government should not stand in the way of people with exceptional talent who want to help build the future in America.

Thank you again for the opportunity to testify today. I look forward to your questions.