USGS DISCOVERS 2.3-MILLION-TON APPALACHIAN LITHIUM DEPOSIT

Date: 22 July 2026

US Policy and Regulatory Alert

By: Matthew H. Leggett, John W. Northington Jr., Laurie B. Purpuro, Jasper G. Noble

On 28 April 2026, the US Geological Survey (USGS) announced the publication of a new USGS scientific paper assessing undiscovered lithium oxide deposits in the eastern US Appalachian region.[1] The report shows that the Appalachian region contains up to 2.3 million metric tons of "undiscovered, economically recoverable lithium" across the mountain range. This unexplored lithium is primarily found in pegmatites, large-grained rocks that are similar to granite. According to USGS, 2.3 million metric tons of lithium could meet US annual import rates for an estimated 328 years.

The majority of the lithium deposits identified in the USGS report are in the Carolinas, Maine, and New Hampshire, with some smaller, partial deposits found in Pennsylvania, New Jersey, Delaware, Massachusetts, Rhode Island, Connecticut, New York, and Vermont.

USGS Director Ned Mamula highlighted the agency's role in restoring US mineral independence and celebrated the "abundant potential" for lithium development based on the report. The USGS announcement echoed the broader Administration push to accelerate domestic mineral production and reinforced USGS's responsibility to assess US mineral resources and implement President Donald Trump's "Unleashing American Energy" and "Immediate Measures to Increase American Mineral Production" executive orders.

LITHIUM MARKET OVERVIEW

Domestic lithium production in the United States is sourced primarily from a Nevada brine operation, which, in 2024, produced around 4,000 tons of lithium, less than 1% of world production.[2] The US imports approximately 3,800 tons of lithium for consumption and 2,000 tons for exports.[3] The majority of US lithium imports come from Chile and Argentina, at 54% and 43%, respectively, and the other 3% from other parts of the world.[4] Global lithium production in 2025 was 290,000 tons, a 31% increase from the previous year, with global consumption at 263,000 tons, up 20% from 2024.[5] Australia, China, and Chile in 2025 produced the most lithium at 92,000, 62,000, and 56,000 tons, respectively.[6] It is expected that by the mid-2030s, the global demand for lithium will be at a deficit even while the prospects for new lithium projects being developed are strong.[7] By 2040, global lithium demand is forecasted to be five times current demand.[8]

GOVERNMENT EFFORTS TO INCREASE DOMESTIC LITHIUM PRODUCTION

Over the last two presidential administrations, as domestic and international demand for lithium has continued to grow, government efforts to incentivize and support lithium extraction and production have rapidly expanded. The Biden and Trump administrations deployed federal funds and invoked various executive authorities to accelerate

©2005-2026 K&L Gates LLP. All Rights Reserved.

growth of the domestic lithium industry. The federal government, as well as state and local governments across the country, have demonstrated encouraging support for lithium development in the United States across geographical borders and political affiliation, and continued bipartisan efforts are expected as the demand for energy storage, battery technology, and renewable energy technology grows.

EXECUTIVE ORDERS

President Joe Biden signed several executive orders, including “America's Supply Chains,” that prioritized identifying weaknesses in the US critical minerals supply chain and identifying policies to strengthen it.[9] In the first two years of the second Trump administration, President Trump has issued executive orders that have focused specifically on critical minerals, including “Unleashing American Energy,” “Immediate Measures to Increase American Mineral Production,” and “Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects.”[10]

These orders have rescinded regulatory actions that burden domestic mining and processing, directing the National Energy Dominance Council (NEDC) to identify priority mineral projects for immediate permitting approval, and underscored the importance of interagency coordination for funding energy and critical mineral projects.[11]

THE EXPORT-IMPORT BANK OF THE UNITED STATES

The Export-Import Bank of the United States (EXIM) provides financing opportunities for mining and energy sector transactions.[12] EXIM in the last year has issued US$14.8 billion in letters of interest for critical mineral projects, specifically US$400 million for lithium extraction in Arkansas.[13] EXIM has two programs that are of importance in the critical minerals space: the China and Transformational Exports Program and the Make More in America Initiative, which both work to ensure projects are rooted in the United States rather than abroad.[14]

DEPARTMENT OF ENERGY

The Department of Energy (DOE) Loan Programs Office has also recently provided loans and conditional commitments to lithium projects, which has included: a US$2.3 billion loan for Lithium Americas' Thacker Pass project (lithium carbonate from clay), a US$996 million loan for Ioneer's Rhyolite Ridge project (lithium carbonate and boric acid), a US$475 million loan for Glencore Battery Recycling (lithium, nickel, cobalt, and manganese extraction), and a US$1.4 billion conditional commitment for EnergySource Minerals' Project ATLiS (lithium hydroxide from geothermal brine).[15]

In August 2025, DOE announced the agency's intent to issue notices of funding opportunities (NOFO) of almost US$1 billion to advance technologies across the different stages of critical minerals and materials supply chains.[16] This includes the “Critical Minerals and Materials Accelerator” NOFO from DOE's Office of Critical Minerals and Energy Innovation, the Advanced Materials and Manufacturing Technologies Office, and the Office of Geothermal, which was announced in April 2026 and provides up to US$69 million.[17] This NOFO includes three topic areas, one being relevant in the lithium industry: cost-competitive direct lithium extraction, separation, and processing.[18]

©2005-2026 K&L Gates LLP. All Rights Reserved.

DEPARTMENT OF DEFENSE

The Department of Defense (DoD) has provided funding in recent years for lithium projects through the Defense Production Act (DPA) Investments office. In September 2023, the Office of the Assistant Secretary for Industrial Base Policy, through its Manufacturing Capability Expansion and Investment Prioritization office announced a US$90 million agreement under the DPA for the reopening of the Albermale Kings Mountain lithium mine in North Carolina, which in March 2026 completed federal permitting under Title 41 of the Fixing America's Surface Transportation Act.[19] Finally, the Lithium Nevada Corporation was awarded US$11.8 million from the DPA for a lithium project.[20]

The Defense Logistics Agency issued notices in March 2026 regarding lithium stockpiling. Lithium is essential for military weapon systems and batteries and is considered a strategic material for national security.

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE (USTR)

USTR has been engaging in global cooperation with respect to critical minerals. In February 2026, USTR announced an action plan with Mexico on critical minerals for a future of collaboration and coordination to strengthen supply chain resilience with critical minerals.[21] USTR also announced in February 2026 an intent to develop action plans on critical minerals between the United States, the European Commission, and Japan.[22]

ACTIONS BY STATE GOVERNMENTS

State governments have also taken steps to develop lithium deposits. Mississippi's Development Authority released a report in May titled “2026 Mississippi Natural Resources Summit: Critical Minerals in the State,” detailing the potential for domestic production in the area due to the Smackover Formation in southern Mississippi, which could contain lithium concentrations as high as 340+ milligrams per liter.[23]

The California State Legislature created a Lithium Valley Commission to look into lithium recovery in the Eastern Coachella Valley and Imperial Valley, near the Mexican border, which potentially could contain enough lithium to support over 375 million batteries for electric vehicles.[24]

In Nevada, currently the only US state that produces commercial lithium, the Governor's Office of Economic Development coordinates with lithium producers[25] on the “lithium loop,” a complete circular lithium supply chain. Over 20,000 employees are employed across the Nevada lithium supply chain.[26] Nevada provides a variety of state tax abatements to support lithium production and processing.[27]

LOOKING AHEAD

The 119th Congress has considered proposals to strengthen domestic production of critical minerals like lithium. In February 2026, the US House of Representatives passed the bipartisan Critical Mineral Dominance Act (H.R. 4090), which expands on President Trump's executive orders to streamline critical mineral projects. If the Democratic Party retakes the majority in either the House of Representatives or the Senate in the November midterm elections, federal support for increasing domestic critical mineral production will very likely continue to be a top-priority issue capable of garnering rare bipartisan cooperation.

©2005-2026 K&L Gates LLP. All Rights Reserved.

The firm's Public Policy and Law practice group and Critical Minerals practice group are closely monitoring these and other national developments in the lithium industry and would be happy to discuss the impacts and opportunities of government actions and relevant funding pathways.

FOOTNOTES

[1] Press Release, U.S. Geological Soc'y, Lithium in Eastern States Could Replace Imports for a Century or More (Apr. 28, 2026), https://www.usgs.gov/news/national-news-release/lithium-eastern-states-could-replace-imports-a-century-or-more.

[2] U.S. Geological Soc'y, Lithium, USGS Mineral Commodity Summaries 2026 (Feb. 2026), https://pubs.usgs.gov/periodicals/mcs2026/mcs2026-lithium.pdf; Press Release, Michael Plante & Isabelle Tseng, Fed. Rsrv. Bank of Dall., Rush for US Lithium Encounters Tough Economics (Oct. 14, 2025), https://www.dallasfed.org/research/economics/2025/1014-plante-lithium.

[3] USGS Mineral Commodity Summaries 2026, *supra* note 2.

[4] *Id*.

[5] *Id*.

[6] *Id*.

[7] *Id.*

[8] Int'l Energy Agency, Global Critical Minerals Outlook 2025 (May 2025), https://www.iea.org/reports/global-critical-minerals-outlook-2025/overview-of-outlook-for-key-minerals.

[9] Exec. Order No. 14,017, 86 Fed. Reg. 11,849 (Mar. 1, 2021), https://www.federalregister.gov/documents/2021/03/01/2021-04280/americas-supply-chains.

[10] Exec. Order No. 14,154, 90 Fed. Reg. 8353 (Jan. 20, 2025), https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/; Exec. Order No. 14,241, 90 Fed .Reg. 13,673 (Mar. 20, 2025), https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/; Memorandum on Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects (June 30, 2025), https://www.whitehouse.gov/presidential-actions/2025/06/simplifying-the-funding-of-energy-infrastructure-and-critical-mineral-and-material-projects/.

[11] Exec. Order No. 14,154, 90 Fed. Reg. 8353 (Jan. 20, 2025), https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/; Exec. Order No. 14,241, 90 Fed .Reg. 13,673 (Mar. 20, 2025), https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/; Memorandum on Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects (June 30, 2025), https://www.whitehouse.gov/presidential-actions/2025/06/simplifying-the-funding-of-energy-infrastructure-and-critical-mineral-and-material-projects/.

[12] EXIM Support for Critical Minerals Transactions, EXPORT-IMPORT BANK OF THE U.S., https://www.exim.gov/about/special-initiatives/ctep/critical-minerals (last visited June 30, 2026).

[13] Fact Sheet, U.S. Dep't of State, 2026 Critical Minerals Ministerial (Feb. 4, 2026),

©2005-2026 K&L Gates LLP. All Rights Reserved.

https://www.state.gov/releases/office-of-the-spokesperson/2026/02/2026-critical-minerals-ministerial.

[14] EXIM Support for Critical Minerals Transactions, supra note 12; Make More in America Initiative, EXPORT-IMPORT BANK OF THE U.S., https://www.exim.gov/about/special-initiatives/make-more-in-america-initiative (last visited June 30, 2026).

[15] 2026 Critical Minerals Ministerial, *supra* note 13.

[16] Press Release, U.S. Dep't of Energy, Energy Department Announces Actions to Secure American Critical Minerals and Materials Supply Chain (Aug. 13, 2025), https://www.energy.gov/articles/energy-department-announces-actions-secure-american-critical-minerals-and-materials-supply.

[17] Critical Minerals and Materials Accelerator, U.S. DEP'T OF ENERGY, https://www.energy.gov/cmei/ammto/critical-minerals-and-materials-accelerator-0 (last visited June 30, 2026).

[18] *Id.*

[19] Press Release, Permitting Council, Kings Mountain Lithium Material Processing Plant Project Completes Federal Permitting (Mar. 30, 2026), https://www.permitting.gov/newsroom/press-releases/kings-mountain-lithium-material-processing-plant-project-completes-federal; Press Release, U.S. Dep't of War, DoD Enters Agreement to Expand Domestic Lithium Mining for U.S. Battery Supply Chains (Sept. 12, 2023), https://www.war.gov/News/Releases/Release/article/3522657/dod-enters-agreement-to-expand-domestic-lithium-mining-for-us-battery-supply-ch.

[20] Press Release, U.S. Dep't of War, Department of Defense Awards $11.8 Million to Accelerate Development of Domestic Lithium Carbonate Processing and Production (Aug. 5, 2024), https://www.war.gov/News/Releases/Release/Article/3861583/department-of-defense-awards-118-million-to-accelerate-development-of-domestic/.

[21] Press Release, Office of the U.S. Trade Representative, Ambassador Jamieson Greer Announces U.S.-Mexico Action Plan on Critical Minerals (Feb. 4, 2026), https://ustr.gov/about/policy-offices/press-office/press-releases/2026/february/ambassador-jamieson-greer-announces-us-mexico-action-plan-critical-minerals.

[22] Press Release, Office of the U.S. Trade Representative, Ambassador Jamieson Greer Announces Critical Mineral Cooperation with the European Union and Japan (Feb. 4, 2026) https://ustr.gov/about/policy-offices/press-office/press-releases/2026/february/ambassador-jamieson-greer-announces-critical-minerals-cooperation-european-union-and-japan.

[23] Press Release, Governor Tate Reeves, New Report Positions Mississippi for Critical Minerals Growth (May 27, 2026), https://governorreeves.ms.gov/new-report-positions-mississippi-for-critical-minerals-growth/; Miss. Dev. Auth., 2026 Mississippi Natural Resources Summit: Critical Minerals in the State (2026), https://mcusercontent.com/08cb3e52aa1308600f84d49ea/files/1b1fe4a9-2401-b4b8-e7e0-f4910be01da8/MDA_2026_Critical_Minerals_Report.pdf.

[24] Lithium Valley Vision, CAL. ENERGY COMM'N, https://www.energy.ca.gov/programs-and-topics/programs/lithium-valley-vision (last visited June 30, 2026).

[25] Lithium Loop, NEV. GOVERNOR'S OFF. OF ECON. DEV., https://goed.nv.gov/lithium-loop/#faq (last visited June 30, 2026).

©2005-2026 K&L Gates LLP. All Rights Reserved.

[26] *Id.*

[27] *Id.*

KEY CONTACTS



MATTHEW H. LEGGETT
PARTNER

WASHINGTON, DC
+1.202.778.9087
MATT.LEGGETT@KLGATES.COM



JOHN W. NORTHINGTON JR.
GOVERNMENT AFFAIRS ADVISOR

HOUSTON, WASHINGTON, DC
+1.713.815.7318
JOHN.NORTHINGTONJR@KLGATES.COM



LAURIE B. PURPURO
GOVERNMENT AFFAIRS COUNSELOR

WASHINGTON, DC
+1.202.778.9206
LAURIE.PURPURO@KLGATES.COM



JASPER G. NOBLE
ASSOCIATE

WASHINGTON, DC
+1.202.778.9221
JASPER.NOBLE@KLGATES.COM

This publication/newsletter is for informational purposes and does not contain or convey legal advice. The information herein should not be used or relied upon in regard to any particular facts or circumstances without first consulting a lawyer. Any views expressed herein are those of the author(s) and not necessarily those of the law firm's clients.

©2005-2026 K&L Gates LLP. All Rights Reserved.