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SEPTEMBER 20, 2024

FACT SHEET: Biden-Harris Administration Takes Further Action to Strengthen and Secure Critical Mineral Supply Chains

Department of Energy Battery Supply Chain Awards Build on Four Years of Whole-of-Government Effort to Increase Domestic and Allied Supply of Critical Minerals

Critical minerals are essential building blocks of the modern economy and our energy security, from clean energy technologies like high-capacity batteries and wind turbines to semiconductors, advanced defense systems, and consumer electronics. Over the past several decades, China has cornered the market for processing and refining of key critical minerals, leaving the U.S. and our allies and partners vulnerable to supply chain shocks and undermining economic and national security. As the world builds a clean energy economy, demand for critical minerals is projected to grow exponentially.

President Biden recognized this challenge and took immediate action. In his first weeks in office, he signed Executive Order 14017, America's Supply Chains, which mandated a 100-day review of U.S. critical mineral supply chains. Following the report's recommendations, the Biden-Harris Administration has mobilized historic resources to strengthen domestic critical minerals supply chains, from mining to manufacturing to recycling. These investments are strengthening U.S. energy and national security; boosting American manufacturing; creating good-paying and union jobs in mining, construction, and manufacturing; and reducing reliance on unreliable supply chains.

Since President Biden took office, companies have announced more than

\$120 billion in investments in battery and critical mineral supply chains.

Through the Biden-Harris Administration's Investing in America agenda, the Department of Energy, the Department of Defense, the Department of the Treasury, and the Department of Commerce are supporting the domestic battery and critical mineral supply chain through grants, loans, and allocated tax credits. That investment has created new jobs: over 250,000 new American energy jobs were added last year—with clean energy jobs growing twice as fast as the rest of the sector.

This investment has also dramatically expanded the U.S. critical minerals industrial base and reduced reliance on foreign and unreliable supply chains. In 2021, the U.S. had enough operating and announced battery manufacturing capacity to power 500,000 electric vehicles—today, announced battery gigafactories will power 10 million electric vehicles, enough to meet domestic demand by 2030. In 2021, U.S. lithium producers met just 5 percent of global demand. Thanks to investments in processing and manufacturing, the US is not just keeping pace with the fivefold increase in lithium demand but is on track to outpace it: the U.S. is set to supply more than one-fifth of global demand outside of China by 2030.

After years of ceding ground to China, we are now winning the competition for the 21st Century, protecting our industrial base and creating good jobs, and strengthening our energy and national security thanks to the Biden-Harris Administration's actions to secure critical mineral supply chains.

Battery Material Processing and Manufacturing

Today, the Department of Energy is announcing over \$3 billion across 25 projects through the Bipartisan Infrastructure Law to extract, process, and recycle critical minerals and materials and manufacture key battery components, as well as support next-generation battery manufacturing. Combined with the first round of battery material processing and manufacturing awards, funding from this program will generate \$16 billion in public and private sector investment throughout the entire battery supply chain. Project details can be found here.

This announcement supports a whole-of-government effort to build an endto-end domestic supply chain for electric vehicle and grid storage batteries:

- The Department of the Treasury allocated \$800 million through the first round of allocations under the Inflation Reduction Act Section 48C Qualifying Advanced Energy Project Tax Credit for critical mineral processing, refining and recycling, including for lithium-ion battery recycling, battery material processing, and battery component manufacturing.
- The Department of Energy Loan Program Office closed a loan of \$2.5 billion to Ultium Cells and issued a conditional commitment of \$9.2 billion to BlueOval SK, joint ventures between General Motors and LG Energy and Ford and SK respectively, for six total battery manufacturing facilities with more than 200 gigawatt hours of capacity, enough to power more than 2 million EVs.
- The Loan Program Office has also issued a \$2 billion conditional commitment to Redwood Materials for a first-of-its-kind battery material manufacturing and recycling project in Nevada to produce critical battery components that are currently dominated by China using recycled batteries and material.
- The Loan Program Office issued a \$102 million loan to Syrah
 Technologies to produce graphite-based active anode material for EV
 batteries in Louisiana. Syrah processes natural graphite from its Balama,
 Mozambique mine, which received conditional commitment of up to
 \$150 million in financing from the U.S. International Development
 Finance Corporation to support the full graphite supply chain.
- The Department of Commerce awarded \$21 million to the Nevada Tech Hub, led by the University of Reno, Nevada, to build a globally competitive full lithium supply chain and innovation cluster from extraction through recycling, building on the lithium assets, workforce, and research institutions in the area.
- In May, President Biden directed his U.S. Trade Representative to raise tariffs on imported EV and grid storage batteries from China, as well as certain critical minerals, to counter China's unfair trade practices, which will defend U.S. manufacturers from being undercut by artificially cheap products.

Supporting Responsible Domestic Mining

To meet the nation's climate, infrastructure, and global competitiveness goals, the U.S. must expand and accelerate responsible domestic production of critical minerals in a manner that upholds strong environmental, labor, safety, Tribal consultation, and community engagement standards. By responsibly permitting, managing operations, and remediating mines, the U.S. can set a global standard for responsible mineral development and create good-paying jobs in communities across the country:

- The Department of Energy Loan Programs Office issued a \$2.26 billion conditional commitment for lithium processing at the fully permitted Thacker Pass lithium mine in Nevada, which will produce enough lithium to power more than 800,000 EVs annually when operational.
- The Department of Energy Loan Programs Office issued a \$700 million conditional commitment for lithium processing at the Rhyolite Ridge lithium mine in Nevada, which plans to produce enough lithium to power 370,000 new EVs annually when operational. Yesterday, the Bureau of Land Management issued the final Environmental Impact Statement for the project.
- The Department of Defense awarded Albemarle \$90 million through the Defense Production Act to support the restart of the Kings Mountain lithium mine in North Carolina, which could produce enough lithium to power 1.2 million new EVs annually when operational.
- The Department of Energy <u>awarded</u> \$39 million through the Advanced Research Projects Agency-Energy Mining Innovations for Negative Emissions Resource Recovery (MINER) program to 16 projects to develop technologies to increase the domestic supply of critical minerals while reducing energy use and emissions.
- The Department of the Interior approved the Gibellini vanadium project in Nevada, the first vanadium mine in the U.S., which will support next-generation energy storage batteries, steelmaking and advanced alloys.
- The Department of Agriculture issued a final Environmental Impact Statement and draft Record of Decision for the Stibnite gold-antimony project in Idaho. Supported by \$60 million in funding through the Defense Production Act, the project will be the only domestic source for

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- The \$1.7 billion Hermosa zinc-manganese project in Arizona became the first mining project to receive FAST-41 coverage, supporting coordination, collaboration and transparency in the permitting process. Today, South32 also received a [\$x] Department of Energy award to process the manganese produced by the mine for electric vehicle batteries.
- The Department of Energy Loan Programs Office clarified that domestic critical minerals mining and extraction projects are eligible for financing under the Title 17 Clean Energy Financing Program, broadening its support for critical minerals projects.

Establishing a "Mine-to-Magnet" Supply Chain for Rare Earth Elements

Rare earth permanent magnets power everything from electric vehicle motors and wind turbines to missile defense systems. Currently, large portions of the supply chain, from mining to processing to magnet manufacturing, are controlled by China. Through the Department of Defense and the Department of Energy, the Biden-Harris Administration is taking action to secure domestic production throughout the magnet supply chain.

- The Department of Defense has awarded \$45 million to MP Materials for rare earth oxide processing at Mountain Pass, the only operating U.S. rare earth element mine, and more than \$288 million to Lynas USA to establish commercial-scale rare earth oxide production.
- Down the supply chain, the Department of Defense has invested more than \$94 million in E-VAC Magnetics to establish a commercial-scale magnet manufacturing facility in South Carolina, as well as metals and alloys. E-VAC also disclosed that it was allocated \$112 million through the Inflation Reduction Act 48C tax credit to support its manufacturing facility.
- M.P. Materials voluntarily <u>disclosed</u> that it was allocated nearly \$60 million through the Inflation Reduction Act Section 48C tax credit to advance its rare earth permanent magnet manufacturing facility in Fort

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- The Department of Energy <u>awarded</u> \$17.5 million to Niron Magnetics through the Advanced Research Projects Agency-Energy Seeding Critical Advances for Leading Energy technologies with Untapped Potential (SCALEUP) program for pilot production efforts to commercialize an iron nitride based rare-earth free permanent magnets.
- The President directed his U.S. Trade Representative to increase tariffs on permanent magnets beginning in 2026, which will protect U.S. magnet producers from being undercut by unfair trade practices.

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