

NEAR-SHORING CRITICAL MINERAL SUPPLY CHAINS IN THE WESTERN HEMISPHERE

Critical minerals are necessary for nearly every aspect of life in the 21st Century. They are defined as "any non-fuel mineral, element, substance or material," that serve an essential function and have a "high risk for supply chain disruption." Demand for these minerals has skyrocketed due to growth and innovation in the technology, transportation, and energy industries. For example, the amount of copper needed by 2035 is projected to equal over twice the amount of copper used by humans since 1900.³

While the Biden administration continues its war on manufacturing and mining, China is growing its monopoly over the world's critical mineral market.

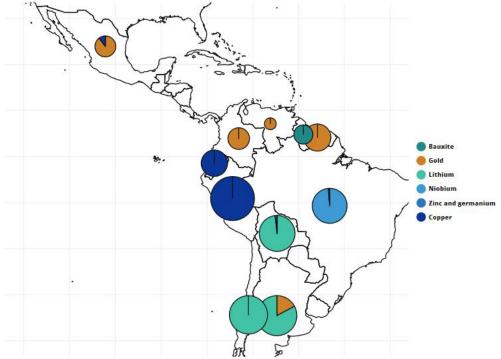
BACKGROUND

China houses approximately 36 percent⁴ of the world's rare earth minerals and controls 90 percent of processing.⁵ Even more concerning is China's control of the minerals that are necessary for America's defense. For example, China produces 98 percent of the world's supply of raw gallium, which is a vital component of specialized semiconductors in advanced weapon systems.⁶ Recently China announced export restrictions on gallium as retaliation against U.S. export controls on advanced chips and related equipment.⁷

Critical Minerals in Latin America

In their bid to cement control of the global supply of critical minerals, China and their government-affiliated companies have invested heavily in other countries with mineral reserves. In Latin America, China shifted investment strategies from the Belt and Road Initiative, which supported large-scale infrastructure projects in the region, to "new infrastructure" which aligns their foreign direct investment with China's economic growth planes for key industries that rely on critical minerals. [For more information on China and Latin America, see RPC's guide "China's Involvement in Latin America" Projects include:

- China's Zijin Mining company purchased a gold mine in the Colombian Andes for \$1 billion in 2019. 10
- China-based company Tianqi Lithium has a 25 percent stake in Chile's SQM, which is one of the world's largest lithium producers. 11, 12
- Since 2011, China has systematically purchased stakes in Brazilian niobium mines, the world's largest source of this critical mineral. 13
- A state-owned Chinese company has a 60% stake in a new massive commercial port being built in Peru that will super-charge trade ties between South America and China. 14



China foreign direct investment in critical metals and minerals. 15

POLICY SOLUTIONS

America's dependence on China for critical minerals that power daily lives and safeguard national security is not tenable and should be viewed as an enormous security threat. ¹⁶ To increase domestic supply, the U.S. should reform outdated environmental regulations that are roadblocks to responsible mining and refining. The federal government should also fully review all federal lands, including offshore land, that have resources the country needs and reform lease and permitting processes to maximize opportunities.

Building domestic supply chains will not fully provide all the critical minerals America needs. ¹⁷ America must work closely with its neighbors, such as Canada and Latin American countries, to near-shore mining and refining. Strategies to accomplish this include:

- Passage of the Critical Minerals Security Act, which would direct the U.S. Department of the Interior to evaluate
 the global supply of minerals and develop a process to share mining and refining technology advancements with
 allies.¹⁸
- Direct the U.S. State Department to prioritize assisting U.S. companies' negotiation rights to critical minerals in allied Western Hemisphere countries.
- Conduct a full audit of all aid programs to Latin American countries and defund any that advance programs that would hamper mining and refinement industries.
- Identify and connect key drivers of trade and other Western Hemisphere policies within the executive branch to develop a cohesive strategy to build out critical mineral supply chains.

¹ H.R. 133. 116th Congress. https://republicans-science.house.gov/_cache/files/f/3/f3916ab1-1d9b-428c-9f81-bbc33d9b5b55 /501924497A34C21E5EF3C335F2BE370C.division-z---energy-act.pdf

² Critical minerals market sees unprecedented growth as clean energy demand drives strong increase in investment. International Energy Agency. July 11, 2023. https://www.iea.org/news/critical-minerals-market-sees-unprecedented-growth-as-clean-energy-demand-drives-strong-increase-in-investment

³ The Future of Copper. S&P Global. July 2022. https://cdn.ihsmarkit.com/www/pdf/0722/The-Future-of-Copper_Full-Report 14July2022.pdf

- ⁴ Foss, Michelle and Koelsch, Jacob. Of Chinese Behemoths: What China's Rare Earths Dominance Means for the US. The Baker Institute. December 19, 2022. https://www.bakerinstitute.org/research/chinese-behemoths-what-chinas-rare-earths-dominance-means-us
- ⁵ The Role of Critical Minerals in Clean Energy Transitions. International Energy Agency. May 2021. https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary
- ⁶ Funaiole, Matthew et al. De-risking Gallium Supply Chains: The National Security Case for Eroding China's Critical Mineral Dominance. Center for Strategic and International Studies. August 3, 2023. https://www.csis.org/analysis/de-risking-gallium-supply-chains-national-security-case-eroding-chinas-critical-mineral
- ⁷ Funaiole, Matthew et al. Mineral Monopoly: China's Control over Gallium is a National Security Threat. Center for Strategic and International Studies. July 18, 2023. https://features.csis.org/hiddenreach/china-critical-mineral-gallium/
- ⁸ Myers, Margaret et al. "New Infrastructure" Emerging Trends in Chinese Foreign Direct Investment in Latin America and the Caribbean. The Dialogue. January 2024. https://www.thedialogue.org/wp-content/uploads/2024/01/Emerging-Trends-in-Chinese-Foreign-Direct-Investment-in-LAC.pdf
- ⁹ https://republicanpolicy.house.gov/sites/evo-subsites/republicanpolicy.house.gov/files/evo-media-document/chinas-involvement-in-latin-america.pdf
- ¹⁰ Chiappe, Santiago. Zijin wants to be the first Chinese mining company in Colombia. Dialogo Chino. July 8, 2020. https://dialogochino.net/en/extractive-industries/36226-zijin-wants-to-be-the-first-chinese-mining-company-in-colombia/
- ¹¹ Tianqi Lithium to acquire stake in Chile's SQM for \$4.07bn. Mining Technology. May 21, 2018. https://www.mining-technology.com/news/tianqi-lithium-to-acquire-stake-in-chiles-sqm-for-4-07bn/?cf-view
- ¹²Chew, Carman. World's biggest lithium producers. Reuters. April 21, 2023. https://www.reuters.com/markets/commodities/worlds-biggest-lithium-producers-2023-04-21/
- ¹³ Lockwood, Devi and Schwartz, Leo. Niobium: the mighty element you've never heard of. rest of the world. November 25, 2020. https://restofworld.org/2020/niobium-the-mighty-element-youve-never-heard-of/
- ¹⁴ Zea, Tibisay. A state-owned company from China is building a massive commercial port in Peru. The World. September 20, 2022. https://theworld.org/stories/2022-09-20/state-owned-company-china-building-massive-commercial-port-peru X
- ¹⁵ Myers, Margaret et al. "New Infrastructure" Emerging Trends in Chinese Foreign Direct Investment in Latin America and the Caribbean. The Dialogue. January 2024. https://www.thedialogue.org/wp-content/uploads/2024/01/Emerging-Trends-in-Chinese-Foreign-Direct-Investment-in-LAC.pdf
- ¹⁶ Interagency Task Force in Fulfillment of Executive Order 13806. Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States. Department of Defense. September 2018. https://media.defense.gov/2018/Oct/05/2002048904/-1/-1/1/ASSESSING-AND-STRENGTHENING-THE-MANUFACTURING-AND-DEFENSE-INDUSTRIAL-BASE-AND-SUPPLY-CHAIN-RESILIENCY.PDF
- ¹⁷Allen Bentley et al. Friendshoring Critical Minerals: What Could the U.S. and Its Partners Produce? Carnegie Endowment for International Peace. May 3, 2023. https://carnegieendowment.org/2023/05/03/friendshoring-critical-minerals-what-could-u.s.-and-its-partners-produce-pub-89659
- ¹⁸ S. 3631. 118th Congress. https://www.congress.gov/bill/118th-congress/senate-bill/3631/text