

ballistic missiles to Russia. Period[.] – Sanction addicts should ask themselves: how is Iran able to make & supposedly sell sophisticated arms? Sanctions are NOT a solution, but part of problem.”⁵⁰ Foreign Ministry Spokesperson Nasser Kanani said in a statement that “[t]he move by the three European countries is in line with the West’s hostile policy and economic terrorism against the Iranian people, and will face the corresponding and proportionate move by the Islamic Republic of Iran.”⁵¹

The United States Takes Actions to Secure Supply Chains for Critical Minerals
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In order to decrease U.S. dependence on China for the critical minerals that power cutting-edge technologies, like electric vehicles (EV) and advanced semiconductors, the United States has taken actions to reinforce and diversify its critical minerals supply chains by encouraging domestic production and developing partnerships with allies and mineral-rich countries.¹ “China controls most of the global market in these minerals. And the fact [is] that we can’t build a future that’s made in America if we ourselves are dependent on China for the materials that power the products of today and tomorrow,” President Joseph R. Biden, Jr. said in early 2022 as he kicked off the administration’s efforts.² Since then, the United States has made significant investments in domestic capacity (mining, refining, and recycling) and supported projects abroad to ensure access to minerals, but overall reliance on Chinese imports remains high.³ U.S. initiatives to strengthen and secure critical mineral supply chains have taken on increased

⁵⁰ Iranian Ministry of Foreign Affairs Press Release, Araghchi: Iran Has NOT Delivered Ballistic Missiles to Russia. Period (Sept. 11, 2024), at <https://en.mfa.gov.ir/portal/newsview/753132> [<https://perma.cc/5CJR-3WPC>].

⁵¹ Iranian Ministry of Foreign Affairs Press Release, Iran Condemns European Countries for Baseless Sanctions Reaffirms Stance on Ukraine War (Sept. 11, 2024), at <https://en.mfa.gov.ir/portal/newsview/753102> [<https://perma.cc/Q7HT-JPMP>]; see also Iranian Ministry of Foreign Affairs Press Release, Iran Denounces EU UK Sanctions as Contradictory Unjustified (Oct. 15, 2024), at <https://en.mfa.gov.ir/portal/newsview/754947> [<https://perma.cc/7TDX-KHLN>].

¹ See White House Press Release, Fact Sheet: Biden-Harris Administration Takes Further Action to Strengthen and Secure Critical Mineral Supply Chains (Sept. 20, 2024), at <https://www.whitehouse.gov/briefing-room/statements-releases/2024/09/20/fact-sheet-biden-harris-administration-takes-further-action-to-strengthen-and-secure-critical-mineral-supply-chains> [<https://perma.cc/6JTX-PJKC>] [hereinafter Fact Sheet]; White House Press Release, Fact Sheet: Securing a Made in America Supply Chain for Critical Minerals (Feb. 22, 2022), at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/22/fact-sheet-securing-a-made-in-america-supply-chain-for-critical-minerals> [<https://perma.cc/8VRF-C47Y>].

² White House Press Release, Remarks by President Biden at a Virtual Event on Securing Critical Minerals for a Future Made in America (Feb. 22, 2022), at <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/02/22/remarks-by-president-biden-at-a-virtual-event-on-securing-critical-minerals-for-a-future-made-in-america> [[https://perma.cc/34P\]-RBUR](https://perma.cc/34P]-RBUR)]. The administration’s work on critical minerals has been part of a wider agenda aimed at securing supply chains. See, e.g., Exec. Order 14017, 86 Fed. Reg. 11849 (Feb. 24, 2021).

³ See Fact Sheet, *supra* note 1; Jon Emont, *China Is Winning the Minerals War*, WALL ST. J. (May 21, 2024), at <https://www.wsj.com/finance/commodities-futures/china-dominant-mineral-mining-global-supply-chain-e2b7840e>.

urgency as China has imposed a series of export controls on antimony, gallium, germanium, and graphite since the summer of 2023, culminating in a December 2024 decision to ban (or, in the case of graphite, severely restrict) their sale to the United States.⁴

Under U.S. law, a critical mineral is a mineral that, according to the secretary of the interior, is “essential to the economic or national security of the United States,” “the supply chain of which is vulnerable to disruption,” and “serve[s] an essential function in the manufacturing of a product . . . , the absence of which would have significant consequences for the economic or national security of the United States.”⁵ Among the fifty critical minerals on the U.S. Geological Survey’s official list are:⁶ gallium, which is used in high-performance semiconductors and advanced radars, as well as in phone chargers and electric vehicles;⁷ germanium, which has applications for semiconductors, fiber-optic systems, and solar cells (including in space);⁸ cobalt, graphite, nickel, and lithium, which are required for EV batteries;⁹ antimony and tungsten, which are used in night vision goggles, armor-piercing bullets, explosives, and other military applications;¹⁰ and neodymium, praseodymium, and other rare earth elements that are essential for wind turbines.¹¹ With the accelerating transition to clean energy and the increased reliance of advanced digital technologies, demand for critical minerals is expected to grow significantly.¹² Through local sources, as well as imports from abroad, such as the Democratic Republic of the Congo, Indonesia, and Papua New Guinea,¹³ China dominates the market for the mining and refining of many critical minerals, including antimony (48 percent of mine production), cobalt (78 percent of refined production),

⁴ See Keith Bradsher, *China’s Critical Minerals Embargo Is Even Tougher Than Expected*, N.Y. TIMES (Dec. 9, 2024), at <https://www.nytimes.com/2024/12/09/business/china-critical-minerals.html>.

⁵ Energy Act of 2020, § 7002(c)(4), Pub. L. 116-260, 134 Stat. 1182, 2564 (Dec. 27, 2020).

⁶ 2022 Final List of Critical Minerals, 87 Fed. Reg. 10381 (Feb. 24, 2022). The Department of Defense “monitors more than 250 unique strategic and critical minerals.” White House, Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth, at 154 (June 2021), at <https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf> [<https://perma.cc/ZAV7-K3ER>]. Individual critical minerals often have a plethora of applications. Thus, in the list that follows, the examples given are not meant to be comprehensive.

⁷ See James T. Areddy & Sha Hua, *China Restricts Exports of Two Minerals Used in High-Performance Chips*, WALL ST. J. (July 4, 2023), at <https://www.wsj.com/articles/china-restricts-exports-of-two-metals-used-in-high-performance-chips-a649402b>.

⁸ See *id.*

⁹ See International Energy Agency, *The Role of Critical Minerals in Clean Energy Transitions*, at 5 (2022), at <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf> [<https://perma.cc/EGE8-CRP7>] [hereinafter IEA Report].

¹⁰ See Shane Lasley, *Antimony Is High on DOD Mineral Concerns*, METAL TECH NEWS (Sept. 16, 2024), at <https://www.metaltchnews.com/story/2024/09/16/critical-minerals-alliances-2024/antimony-is-high-on-dod-mineral-concerns/1914.html>.

¹¹ See IEA Report, *supra* note 9, at 28.

¹² See *id.* at 8.

¹³ See Nicholas Bariyo, *In Congo, China Hits Roadblock in Global Race for Cobalt*, WALL ST. J. (Mar. 12, 2022), at <https://www.wsj.com/articles/in-congo-china-hits-roadblock-in-global-race-for-cobalt-11647081180>; Jon Emont, *How China Came to Dominate the World’s Largest Nickel Source for Electric Cars*, WALL ST. J. (July 5, 2023), at <https://www.wsj.com/articles/how-china-came-to-dominate-the-worlds-largest-nickel-source-for-electric-cars-4c081a12>; Jon Emont, *China Harnesses a Technology That Vexed the West, Unlocking a Treasure Chest*, WALL ST. J. (Sept. 9, 2024), at <https://www.wsj.com/world/asia/china-harnesses-a-technology-that-vexed-the-west-unlocking-a-treasure-chest-5d984585>.

gallium (98 percent of primary production), natural graphite (77 percent of mine production), and rare earth elements (69 percent of mine production).¹⁴

U.S. measures to bolster the domestic mining, processing, and recycling of critical minerals have taken the form of grants, loans, and tax credits to support businesses, tariffs to protect manufacturers, and tax credits to promote consumer purchases. The government has provided approvals for a vanadium mine in Nevada, a gold-antimony project in Idaho, and a zinc-manganese project in Arizona.¹⁵ It has issued billions of dollars in loan commitments for lithium processing at mines in Nevada.¹⁶ It has awarded tens of millions of dollars to restart a lithium mine in North Carolina and millions more for rare earth oxide processing at a mine in California.¹⁷ As part of the Section 301 tariffs announced in 2024, the administration imposed 25 percent duties on critical minerals imported from China, including natural graphite, manganese, cobalt, aluminum, zinc, chromium, and tungsten (among others).¹⁸ In the Inflation Reduction Act, Congress included a critical minerals tax credit for consumers who purchased new EVs by the end of 2032.¹⁹ Eligibility for a \$3,750 credit requires that a certain percentage of the critical minerals contained in the EV's battery (starting at 40 percent with cars purchased before 2024 and increasing to 80 percent in 2027 and after) were "extracted or processed . . . in the United States, or . . . any country with which the United States has a free trade agreement in effect."²⁰ EVs purchased after 2024 are excluded from the credit, however, if their batteries contained any critical minerals "extracted, processed, or recycled" by a "foreign entity of concern," a term that encompasses Chinese entities.²¹ The credit's counting of critical minerals from countries "with which the United States

¹⁴ See U.S. Geological Survey, Mineral Commodity Summaries 2024, at 35, 75, 84, 145 (Jan. 2024), at <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024.pdf> [<https://perma.cc/BTW6-5AXA>]; Cobalt Institute, *Cobalt Market Report 2023*, at 31 (May 2024), at https://www.cobaltinstitute.org/wp-content/uploads/2024/05/Cobalt-Market-Report-2023_FINAL.pdf [<https://perma.cc/A7P9-SSKF>].

¹⁵ See Fact Sheet, *supra* note 1.

¹⁶ See *id.*

¹⁷ See *id.*

¹⁸ See Notice of Modification: China's Acts, Policies and Practices Related to Technology Transfer, Intellectual Property and Innovation, 89 Fed. Reg. 76581, 76591 (Sept. 18, 2024); Notice of Modification: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 89 Fed. Reg. 101682 (Dec. 16, 2024); see also Jacob Katz Cogan, *Contemporary Practice of the United States*, 118 AJIL 717, 727 (2024).

¹⁹ See Inflation Reduction Act, § 13401, Pub. L. 117-169, 136 Stat. 1818, 1954 (Aug. 16, 2022) (amending 26 U.S.C. § 30D) [hereinafter IRA]. The statute uses the term "clean vehicle." There is a corresponding \$3,750 tax credit based on the incorporation of U.S.-sourced components in EV batteries. See *id.*, § 13401(e)(1) (codified at 26 U.S.C. § 30D(e)(2)). The IRA contained other provisions to encourage the domestic critical minerals industry, including adding Section 45X to the International Revenue Code to provide a credit for the production of critical minerals. See *id.*, § 13502(a); see also Advanced Manufacturing Production Credit, 89 Fed. Reg. 85,798 (Oct. 28, 2024).

²⁰ See *id.*, § 13401(e)(1) (codified at 26 U.S.C. § 30D(e)(1)). Eligibility is limited to taxpayers with modified adjusted gross income below specified thresholds, which vary according to filing status. See 26 U.S.C. § 30D(f)(10). It is also limited to vehicles below specified manufacturer's suggested retail price thresholds, which vary according to vehicle classification. See 26 U.S.C. § 30D(f)(11). Prior to the IRA, the credit was calculated based on the vehicle's battery capacity.

²¹ IRA, § 13401(e)(2) (codified at 26 U.S.C. § 30D(d)(7)); 42 U.S.C. § 18741(a)(5)(C); 10 U.S.C. § 4872(d)(2) (formerly 10 U.S.C. § 2533c(d)); see also Interpretation of Foreign Entity of Concern, 89 Fed. Reg. 37079 (May 6, 2024); Clean Vehicle Credits Under Sections 25E and 30D; Transfer of Credits; Critical Minerals and Battery Components; Foreign Entities of Concern, 89 Fed. Reg. 37706, 37769 (May 6, 2024) (adding 26 C.F.R. § 1.30D-6) [hereinafter Clean Vehicle Credits Regulations]. A Treasury Department regulation extended the 2024 deadline to the end of 2026 for batteries that include graphite contained in anode materials and

has a free trade agreement in effect” led the United States to enter into negotiations with certain trading partners with which it lacked such agreements.²² This resulted in the signing of a critical minerals agreement with Japan in 2023 (done controversially as an executive agreement)²³ and the entering into negotiations of similar agreements (to date inconclusive) with the European Union and the United Kingdom.²⁴

In addition to promoting a domestic critical minerals industrial base, the United States has also sought to ensure access to minerals by working with allied countries and trade partners to expand existing, and develop new, mining and processing capacities. The United States has entered into memoranda of understanding and compacts with Argentina, Australia, the Democratic Republic of the Congo, India, Mongolia, Norway, Peru, Uzbekistan, Zambia, and other countries to enhance cooperation on critical minerals.²⁵ It has encouraged and

critical minerals contained in electrolyte salts, binders, or additives, giving U.S. automakers additional time to find new suppliers. *See* Clean Vehicle Credits Regulations, *supra* note 21, at 37758, 37770 (adding 26 C.F.R. §§ 1.30D–2(b)(25), 1.30D–6(b)(2)).

²² *See* Ana Swanson & Alan Rappoport, *U.S. and Europe Angle for New Deal to Resolve Climate Spat*, N.Y. TIMES (Mar. 8, 2023), at <https://www.nytimes.com/2023/03/08/business/economy/us-europe-climate.html>. Under applicable regulations, the secretary of the treasury identifies the “count[ies] with which the United States has a free trade agreement in effect.” In making this determination, the secretary considers:

whether an agreement between the United States and that country, as to the critical minerals contained in clean vehicle batteries or more generally, and in the context of the overall commercial and economic relationship between that country and the United States:

- (A) Reduces or eliminates trade barriers on a preferential basis,
- (B) Commits the parties to refrain from imposing new trade barriers,
- (C) Establishes high-standard disciplines in key areas affecting trade (such as core labor and environmental protections), and/or
- (D) Reduces or eliminates restrictions on exports or commits the parties to refrain from imposing such restrictions. . . .

Clean Vehicle Credits Regulations, *supra* note 21, at 37758–59; *see also* U.S. Dep’t of the Treasury, Anticipated Direction of Forthcoming Proposed Guidance on Critical Mineral and Battery Component Value Calculations for the New Clean Vehicle Credit, at 3 (Dec. 2022), at <https://home.treasury.gov/system/files/136/30DWhite-Paper.pdf> [<https://perma.cc/N8RL-D4WV>].

²³ *See* Agreement Between the Government of the United States of America and the Government of Japan on Strengthening Critical Minerals Supply Chains (Mar. 28, 2023), at <https://ustr.gov/sites/default/files/2023-03/US%20Japan%20Critical%20Minerals%20Agreement%202023%2003%2028.pdf> [<https://perma.cc/UJV5-VS54>]; Ana Swanson, *Lawmakers Rebuke Biden for Bypassing Congress in Trade Deal with Japan*, N.Y. TIMES (Mar. 28, 2023), at <https://www.nytimes.com/2023/03/28/business/economy/us-japan-battery-trade-deal.html>.

²⁴ *See* White House Press Release, U.S.-EU Joint Statement of the Trade and Technology Council (Apr. 5, 2024), at <https://www.whitehouse.gov/briefing-room/statements-releases/2024/04/05/u-s-eu-joint-statement-of-the-trade-and-technology-council-3> [<https://perma.cc/P7JQ-GYBJ>]; White House Press Release, Readout of White House Meetings on the U.S.-UK Atlantic Declaration (May 22, 2024), at <https://www.whitehouse.gov/briefing-room/statements-releases/2024/05/22/readout-of-white-house-meetings-on-the-u-s-uk-atlantic-declaration> [<https://perma.cc/73DJ-F4KF>].

²⁵ *See* U.S. Dep’t of State Press Release, The United States Releases Signed Memorandum of Understanding with the Democratic Republic of Congo and Zambia to Strengthen Electric Vehicle Battery Value Chain (Jan. 18, 2023), at <https://www.state.gov/the-united-states-releases-signed-memorandum-of-understanding-with-the-democratic-republic-of-congo-and-zambia-to-strengthen-electric-vehicle-battery-value-chain> [<https://perma.cc/QPV5-ENK2>]; White House Press Release, Australia-United States Climate, Critical Minerals and Clean Energy Transformation Compact (May 20, 2023), at <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/australia-united-states-climate-critical-minerals-and-clean-energy-transformation-compact> [<https://perma.cc/LJE3-943W>]; U.S. Dep’t of Commerce Press Release, Secretary Raimondo and Minister Goyal Convene 6th U.S.-India Commercial Dialogue Meeting (Oct. 3, 2024), at <https://www.commerce.gov/news/press-releases/2024/10/secretary-raimondo-and-minister-goyal-convene-6th-us-india-commercial> [<https://perma.cc/8K3L-943W>].

provided financial support, to both private investors and foreign governments, for projects abroad, including ones in Angola, Mozambique, South Africa, and Tanzania.²⁶ It is working with other developed states in a Minerals Security Partnership to develop cooperatively and responsibly private and public investment in critical minerals supply chains.²⁷ Referring to these initiatives, Under Secretary of State for Economic Growth, Energy and the Environment Jose W. Fernandez said that China is seeking to “drive out competition” in critical minerals through “overproduction and predatory pricing.”²⁸ “We reali[z]e,” he continued, that “we can’t solve this problem with any one single country, we are stronger together.”²⁹

Within the past year and a half, China has increasingly tightened its control over the export of critical minerals. In July 2023, China announced export controls over gallium and

perma.cc/JD6Z-UK33]; U.S. Dep’t of State Press Release, The United States and Mongolia Sign MOU to Collaborate on Critical Minerals (June 26, 2023), at <https://www.state.gov/the-united-states-and-mongolia-sign-mou-to-collaborate-on-critical-minerals> [<https://perma.cc/WV5B-K433>]; U.S. Dep’t of State Press Release, The United States of America and the Argentine Republic Sign Memorandum of Understanding to Strengthen Cooperation on Critical Minerals (Aug. 22, 2024), at <https://www.state.gov/the-united-states-of-america-and-the-argentine-republic-sign-memorandum-of-understanding-to-strengthen-cooperation-on-critical-minerals> [<https://perma.cc/3JR9-YPJF>]; U.S. Dep’t of State Press Release, The United States of America and Peru Sign Memorandum of Understanding to Strengthen Cooperation on Critical Minerals (Aug. 29, 2024), at <https://www.state.gov/the-united-states-of-america-and-peru-sign-memorandum-of-understanding-to-strengthen-cooperation-on-critical-minerals> [<https://perma.cc/R48K-X4UD>]; U.S. Dep’t of State Press Release, United States and Uzbekistan Sign MOU on Critical Minerals Partnership (Sept. 16, 2024), at <https://www.state.gov/united-states-and-uzbekistan-sign-mou-on-critical-minerals-partnership> [<https://perma.cc/BR59-EFLK>]; U.S. Dep’t of State Press Release, Secretary Antony J. Blinken and Norwegian Foreign Minister Espen Barth Eide at the Signing of a Memorandum of Cooperation on High-Standard, Market-Oriented Trade of Critical Minerals (Sept. 30, 2024), at <https://www.state.gov/secretary-antony-j-blinken-and-norwegian-foreign-minister-espen-barth-eide-at-the-signing-of-a-memorandum-of-cooperation-on-high-standard-market-oriented-trade-of-critical-minerals> [<https://perma.cc/37KQ-CAU5>].

²⁶ See White House Press Release, Fact Sheet: President Biden and Prime Minister Modi Host Leaders on the Partnership for Global Infrastructure and Investment (Sept. 9, 2023), at <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/09/fact-sheet-president-biden-and-prime-minister-modi-host-leaders-on-the-partnership-for-global-infrastructure-and-investment> [<https://perma.cc/36DB-B5NG>]; White House Press Release, Fact Sheet: Partnership for Global Infrastructure and Investment in the Lobito Trans-Africa Corridor (Dec. 3, 2024), at <https://www.whitehouse.gov/briefing-room/statements-releases/2024/12/03/fact-sheet-partnership-for-global-infrastructure-and-investment-in-the-lobito-trans-africa-corridor> [<https://perma.cc/RN9Z-2T6R>]; U.S. International Development Finance Corp. Press Release, Testimony by DFC CEO Scott Nathan to the House Committee on Foreign Affairs (May 7, 2024), at <https://www.dfc.gov/media/speeches-testimony/testimony-dfc-ceo-scott-nathan-house-committee-foreign-affairs-1> [<https://perma.cc/MD9Q-WP8M>]; Michael M. Phillips, *How the U.S. Is Derailing China’s Influence in Africa*, WALL ST. J. (Jan. 21, 2024), at <https://www.wsj.com/world/africa/angola-africa-china-us-railroad-f0e23523>; Alexandra Wexler & Julie Steinberg, *How the U.S. Is Trying to Challenge China’s Cobalt Chokehold*, WALL ST. J. (Oct. 15, 2024), at <https://www.wsj.com/world/africa/american-companies-cobalt-mine-congo-china-ff5a1560>.

²⁷ See U.S. Dep’t of State, Minerals Security Partnership, at <https://www.state.gov/minerals-security-partnership> [<https://perma.cc/BFM4-MTPN>]; U.S. Dep’t of State Press Release, Joint Statement on Establishment of the Minerals Security Partnership Finance Network (Sept. 23, 2024), at <https://www.state.gov/joint-statement-on-establishment-of-the-minerals-security-partnership-finance-network> [<https://perma.cc/U8U6-37CK>]; Minerals Security Partnership, Principles for Responsible Critical Mineral Supply Chains (2023), at <https://www.state.gov/wp-content/uploads/2023/02/MSP-Principles-for-Responsible-Critical-Mineral-Supply-Chains-Accessible.pdf> [<https://perma.cc/H3TC-ABT6>].

²⁸ See Jamie Smyth, Myles McCormick & Harry Dempsey, *Western Nations Join Forces to Break China’s Grip on Critical Minerals*, FIN. TIMES (Sept. 23, 2024), at <https://www.ft.com/content/2984ae03-df15-420b-89cc-9ad8337014a9>.

²⁹ *Id.*

germanium, and in October 2023 restrictions were placed on the export of graphite.³⁰ Later that year, China prohibited the export of rare earth processing technologies.³¹ In September 2024, China restricted the export of antimony, causing prices to double.³² In October, the Chinese government implemented rules that required exporters of rare earth metals to provide the government with information on how they would be used in Western supply chains.³³ In December, in a move reminiscent of its two-month embargo of rare earth mineral sales to Japan in 2010,³⁴ China banned the export of antimony, gallium, germanium, and superhard materials to the United States and imposed a strict licensing requirement for the export of graphite.³⁵ It also banned the transshipment of these minerals to the United States from third countries.³⁶ More generally, China banned the export of “[d]ual-use items . . . to military users or for military purposes in the United States.”³⁷ The ban on gallium and germanium could result in a \$3.4 billion decrease in U.S. GDP.³⁸

China’s most recent action was said to be in retaliation for the Biden administration’s announcement, the day before, of new export controls on semiconductor manufacturing equipment, software for the development and production of semiconductors, and high-bandwidth memory, and the addition of more than one hundred Chinese companies to the Commerce Department’s Entity List.³⁹ The U.S. action extended rules first promulgated in October 2022 (and updated twice since) that seek to impair China’s access to high-end semiconductors for military applications.⁴⁰ This was the first time that Chinese critical minerals export controls were directed specifically at the United States and the first time that China imposed such restrictions in direct response to the United States’ imposition of controls on the export of advanced technologies to China. “In recent years, the United States has overstretched the concept of

³⁰ See Areddy & Hua, *supra* note 7; Siyi Liu & Dominique Patton, *China, World’s Top Graphite Producer, Tightens Exports of Key Battery Material*, REUTERS (Oct. 20, 2023), at <https://www.reuters.com/world/china/china-require-export-permits-some-graphite-products-dec-1-2023-10-20>.

³¹ See Yusuf Khan, *The Rare Earths Mine That Won’t Need a Single Shovel*, WALL ST. J. (Jan. 17, 2024), at <https://www.wsj.com/articles/the-rare-earths-mine-that-wont-need-a-single-shovel-b962c661>.

³² *China to Limit Antimony Exports in Latest Critical Mineral Curbs*, REUTERS (Aug. 15, 2024), at <https://www.reuters.com/world/china/china-limit-antimony-exports-latest-critical-mineral-curbs-2024-08-15>.

³³ See Keith Bradsher, *China Tightens Its Hold on Minerals Needed to Make Computer Chips*, N.Y. TIMES (Oct. 26, 2024), at <https://www.nytimes.com/2024/10/26/business/china-critical-minerals-semiconductors.html>.

³⁴ See Keith Bradsher, *Amid Tension, China Blocks Vital Exports to Japan*, N.Y. TIMES (Sept. 22, 2010), at <https://www.nytimes.com/2010/09/23/business/global/23rare.html>.

³⁵ See Ministry of Commerce of the People’s Republic of China Press Release, 商务部公告 2024 年第 46 号 关于加强相关两用物项对美国出口管制的公告 (Dec. 3, 2024), at https://www.mofcom.gov.cn/zwgk/zcfb/art/2024/art_3d5e990b43424e60828030f58a547b60.html [<https://perma.cc/3N2L-6FKT>].

³⁶ See *id.*

³⁷ *Id.* (translation by Google Translate). In November 2024, China announced updated Regulations on Export Control of Dual-Use Items would go into effect on December 1. See Giulia Interesse, *China Issues New Export Control Regulations: What Businesses Need to Know?*, CHINA BRIEFING (Nov. 19, 2024), at <https://www.china-briefing.com/news/china-issues-new-export-control-regulations> [<https://perma.cc/92Q5-2SWP>].

³⁸ See U.S. Geological Survey Press Release, USGS Critical Minerals Study: Bans on Gallium and Germanium Exports Could Cost the U.S. Billions (Nov. 19, 2024), at <https://www.usgs.gov/news/national-news-release/usgs-critical-minerals-study-bans-gallium-and-germanium-exports-could> [<https://perma.cc/P8A6-C2KA>].

³⁹ See Foreign-Produced Direct Product Rule Additions, and Refinements to Controls for Advanced Computing and Semiconductor Manufacturing Items, 89 Fed. Reg. 96790 (Dec. 5, 2024); Additions and Modifications to the Entity List; Removals From the Validated End-User (VEU) Program, 89 Fed. Reg. 96830 (Dec. 5, 2024).

⁴⁰ See Jacob Katz Cogan, *Contemporary Practice of the United States*, 117 AJIL 128, 144 (2023).

national security, politicized and weaponized economic and technological issues, abused export control measures, arbitrarily restricted the export of relevant products to China, and put a number of Chinese companies on the sanctions list to suppress and contain them,” a Chinese Ministry of Commerce spokesperson said, explaining the reasoning for the export ban.⁴¹

USE OF FORCE, ARMS CONTROL, AND NON-PROLIFERATION

AUKUS States Advance Their Partnership with the Signing of a Naval Nuclear Propulsion Cooperation Agreement and the Easing of Export Controls on Defense-Related Trade
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Australia, the United Kingdom, and the United States have taken steps to advance the two pillars of the AUKUS security partnership.¹ In August 2024, the three states signed an agreement governing the transfer of information, material, and equipment related to naval nuclear propulsion.² The pact is one of a series of recent actions that lay the groundwork for Australia’s acquisition of conventionally armed, nuclear-powered submarines (the goal of Pillar I).³ Also in August, the three states announced that they had each adopted comparable

⁴¹ *Update: China Tightens Control Over Dual-Use Items Export to U.S.*, XINHUA (Dec. 3, 2024), at <https://english.news.cn/20241203/82640469de9b4334a8b896880720afda/c.html>.

¹ See White House Press Release, Joint Leaders Statement on AUKUS (Sept. 15, 2021), at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/15/joint-leaders-statement-on-auku> [<https://perma.cc/7C5V-9BP2>] [hereinafter AUKUS Announcement]. AUKUS was established in September 2021 as a trilateral partnership to “deepen diplomatic, security, and defense cooperation in the Indo-Pacific region.” See Kristen E. Eichensehr, *Contemporary Practice of the United States*, 116 *AJIL* 164, 165 (2022).

² See Agreement Among the Government of the United Kingdom of Great Britain and Northern Ireland, the Government of Australia, and the Government of the United States of America for Cooperation Related to Naval Nuclear Propulsion (Aug. 5, 2024), at https://assets.publishing.service.gov.uk/media/66d1e4198df4724cad1aeb05/MS_8.2024_Agreement_UK_Australia_USA_Cooperation_Naval_Nuclear_Propulsion.pdf [hereinafter AUKUS Agreement]. The agreement supersedes a prior one that focused only on the exchange of information. See *id.* Art. XII; Agreement Between the Government of the United States of America, the Government of Australia, and the Government of the United Kingdom of Great Britain and Northern Ireland for the Exchange of Naval Nuclear Propulsion Information, TIAS 22-208 (Nov. 22, 2021), at <https://www.state.gov/wp-content/uploads/2022/04/22-208-Multilateral-Nuclear-Energy.pdf> [<https://perma.cc/X4BB-LWKR>]. The United States has entered into civil nuclear cooperation agreements with Australia and the United Kingdom. See Agreement Between the Government of the United States of America and the Government of Australia Concerning Peaceful Uses of Nuclear Energy (May 4, 2010), at https://www.energy.gov/sites/default/files/pi_iec/098b7ef98020d507.pdf [<https://perma.cc/4JB2-EG3K>]; Agreement Between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Peaceful Uses of Nuclear Energy, TIAS 20-1231 (May 4, 2018), at <https://www.state.gov/wp-content/uploads/2021/04/20-1231-United-Kingdom-Nuclear-Energy-Peaceful-Uses.pdf> [<https://perma.cc/WY6V-8SBQ>].

³ See U.S. Dep’t of State Press Release, Announcement of the Agreement Among the Government of the United States of America, the Government of Australia, and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation Related to Naval Nuclear Propulsion (Aug. 8, 2024), at <https://www.state.gov/announcement-of-the-agreement-among-the-government-of-the-united-states-of-america-the-government-of-australia-and-the-government-of-the-united-kingdom-of-great-britain-and-northern-ireland-for-coop> [<https://perma.cc/>].