## **Appendix 1: Evaluative Framework**

#### Introduction

The 2022 U.S. National Security Strategy identifies the People's Republic of China (hereon China) as our "only competitor with both the intent reshape the international order and . . . the economic, diplomatic, military, and technological power to do it." A core tenet of Washington's strategy to compete with China is by aligning our efforts "with our network of allies and partners" to out-compete China in "technological, economic, political, military, intelligence, and global governance domains."

While the United States maintains a broad network of treaty allies and partners and expects them to support its approach to strategic competition with China, Washington's specific expectations—across economic, technological, security, and diplomatic domains—are loosely defined, but can be identified from official statements across both the Biden and Trump administrations. This appendix provides further detail on these expectations in each of the eight categories under evaluation, with a few illustrative examples from primary documents.

#### Reinforce Critical Goods Supply Chains Through Friendshoring

The United States expects its allies to support its efforts to reinforce its supply chains of critical goods—especially critical minerals and microprocessors—in order to reduce its reliance on supply from China. As Biden's treasury secretary Janet Yellen explained in 2023: "We are also pursuing a strategy called "friendshoring" that is aimed at mitigating vulnerabilities that can lead to supply disruptions. We are creating redundancies in our critical supply chains with the large number of trading partners that we can count on." Similarly, Trump's current

Secretary of State Marco Rubio insisted in his nomination hearing that "We have to make sure that the United States is not reliant on any single other nation for any of our critical supply chains."<sup>3</sup>

#### **Reinforce Semiconductor Manufacturing Supply Chains**

Semiconductors are vital to American innovation and national defense, and disruptions in the supply chain have led to serious consequences. For instance, the COVID-19 pandemic triggered a semiconductor shortage that is estimated to have cost the U.S. economy \$240 billion in 2021.<sup>4</sup>

Although China entered the market later, it already is a global leader in OSAT, is increasing its global fab and fabless market share, and remains a key supplier for chip manufacturing materials. Meanwhile, the United States represented eight percent of the semiconductor fabrication market in 2024, and building an additional advanced semiconductor fab can cost upwards of \$20–\$30 billion.<sup>5</sup> The high costs of production and China's exponential rise make cost-sharing and leveraging our allies' existing strengths in advanced and legacy chip production especially important.

To counter China's growing share in the semiconductor market, the United States is working with its allies to maintain their positions within manufacturing supply chains for high-end chips and shift U.S. supplies of legacy chips away from China. The United States expects its allies to expand their capabilities across the global production supply chain for both legacy and leading-edge chips including: research and development, input materials, equipment and components, fabrication facilities and OSAT, and work with U.S. bilateral or multilateral chip initiatives. An ally will be more important for the United States if it possesses the capacity to contribute meaningfully to moving areas of the global supply chain for semiconductors from adversarial to friendly shores.

#### **Increase Critical Minerals Supply Chains Resiliency**

Critical minerals underpin key industrial sectors in the United States, such as semiconductors, batteries, magnets, and defense systems manufacturing.<sup>6</sup> China currently dominates the critical minerals market through its control of over 90 percent of global rare earth element (REE) processing and over half of cobalt, nickel, and lithium processing.<sup>7</sup> This is especially dangerous for the United States as almost three-quarters of the United States' critical mineral imports are from China.<sup>8</sup>

In the critical minerals supply chain, the United States needs to diversify its sources of critical minerals and REEs. The United States expects its allies to mine domestic reserves if they possess any, increase allied-owned, high-volume mining production, and increasing processing and refining capabilities.

#### **Limit China's Access to Advanced Technology**

Denying China access to advanced U.S. chipmaking and other potential dual-use technologies has been central to U.S. strategic competition with China—although at the time of publication the Trump administration has wavered and could reverse course. According to Biden's National Security Advisor Jake Sullivan, "The United States will continue to take necessary action to prevent advanced U.S. technologies from being used to undermine our national security without unduly limiting trade or investment." Although the U.S. remains in the lead in "force multiplier" fields such as semiconductors, AI, and quantum information systems, China has poured considerable resources into its technology sector and has achieved significant milestones amidst U.S. export restrictions. In general, the United States expects its allies to comply with U.S. advanced technology export controls, restrict partnerships with Chinese institutions, deny Chinese investments into domestic innovation, and shift advanced technology manufacturing out of China.

#### **Restrict FDI into China**

Recognizing the potential for Chinese developments in advanced technologies that could be integrated into military applications, the United States has moved to curb investments that would aid China's indigenous technological innovation. This was especially the case in the later years of the Biden administration, which responded to considerable pressure from Republicans on the Hill who wanted to see U.S. venture capital cut off in advanced high-tech sectors, because they feared that it might result in unwanted technology transfer that would advantage China and erode the U.S. competitive edge. The United States thus increasingly expects its allies to restrict Foreign Direct Investment (FDI) supporting Chinese technology firms, research, or joint technology ventures.

#### Provide Basing, Logistics, and Strike Capabilities for Taiwan

The U.S. military now sees a Taiwan contingency as the pacing scenario for modernizing capabilities, updating force posture, and developing new operational concepts.<sup>11</sup> Allied military capabilities in the Indo-Pacific serve various needs, but as the importance of deterrence across the Taiwan Strait has increased, so has the importance of allied contributions to that challenge. Trump and Biden have accordingly pushed allies to increase their capability to support U.S. cross-strait deterrence.

In a Taiwan scenario, the United States would require sufficient basing, logistics, and strike capabilities, including from allies. With China's natural geographical proximity to Taiwan, the United States is dependent on in-theater basing for timely deployment of military equipment, refueling, and coordinating other logistics. Improving interoperability with allies through joint exercises is especially important to improve resilience against targeting of key

information and command mission areas. The United States thus expects its allies to provide access should the need arise. It also looks to allies to provide logistic support to fill gaps in intelligence collection, electronic countermeasures, intra-theater lift capabilities, facilities for refueling and maintenance and other areas.

#### **Co-Develop Military Technology with the United States**

The United States has long looked to allies for cooperative development of certain military technologies—increasingly with China in mind. The Biden administration's National Defense Strategy made this explicit, but the Trump administration has also pursued joint production and development arrangements. Often these arrangements offer considerable benefit to allies, as discussed in the main body of this report, but they can also be crucial to the United States in key areas such as shipbuilding, where the U.S. defense industrial base is constrained—and will remain so for several years.

## Actively Participate and Cooperate with the United States within International Organizations and Global Governance

As a leading advocate for an open international system, the United States has played a preeminent role in the development of the world's multilateral institutions. Recognizing the legitimacy conferred within international institutions, China has worked to increase its influence through financial contributions, strategic staffing placements, lobbying existing leadership, and creating alternative international bodies. Accordingly, the United States expects its allies to assist its aims in international organizations through providing funding, supporting U.S. agenda items, and working with the United States on the creation of multilateral bodies. The importance of these institutions, especially in an Asian context, is growing as China's power there increases. Allies are expected to support common aims in ensuring that the institutions serve their functions as forums for peaceful international diplomacy, commerce, and other common needs.

#### **Estimation of Influence in the Global South**

In 2018, Trump's first term vice president Michael Pence noted that he was "pleased to report that we're streamlining international development and finance programs. We'll be giving foreign nations a just and transparent alternative to China's debt-trap diplomacy." As discussed at other points in this report, the question of influence is challenging. Among the factors examined herein, the importance of Global South influence to the United States' China strategy is probably the most debated. We have included this category nevertheless on the grounds that to omit it would risk missing an important piece of the picture of U.S.-China competition.

# **Appendix 2: FDI Screening Regimes**

Ally	Inbound FDI Screening	Outbound FDI Screening	
Australia	Yes No		
Japan	Yes	Limited	
The Philippines	Yes	No	
South Korea	Yes	Yes	
France	Yes	No	
Germany	Yes	No	
United Kingdom	Yes	Yes	
European Union	Yes	Limited	

#### Key

Yes	Screening regime in place in this country	
Limited	This country has limited outbound screening or is planning a screening regime	
No	This country has no regime in place and limited or no plans to implement one	

Ally	Inbound FDI Screening	Outbound FDI Screening		
Australia	Australia's Foreign Acquisitions and Takeovers Act 1975, which requires foreign investors to notify the Treasurer of proposed investments that meet certain thresholds. The Treasurer has the authority to review and approve, impose conditions on, or prohibit transactions if they are found to be contrary to the national interest or national security. <sup>14</sup>	equires foreign developed national security screening regime for outbound foreign direct investments. The 2024 Defence Trade Controls Amendment Act and the Defence Trade Legislation Amendment Regulations focuses on increasing export controls on		
Japan	As of 2025, Japan has significantly tightened its FDI screening under the Foreign Exchange and Foreign Trade Act (FEFTA). Foreign investors are required to notify and, in many cases, obtain prior approval for investments in certain sensitive sectors, especially those related to national security and critical technology, including semiconductors, storage batteries, natural gas, metal 3D printers, machine tools and robots, fertilizers, permanent magnets, marine equipment, and metal and mineral products. <sup>16</sup>	Japan has a very limited outbound FDI screening regime that requires prior notification for individuals or firms involved in weapons, narcotics or leather goods. There has been no public discussion or legislation that would increase notification, reviews or the list of screened sectors.		
Phillippines	The Philippines has an inbound FDI screening mechanism through the Amended Public Service Act and Republic Act No. 11647, which empowers the president of the Philippines to suspend or prohibit foreign investments in certain "public services" such as domestic shipping, railways, airlines, power, water, oil, and telecommunications, as well as in "strategic industries" like defense, cyber infrastructure, and pipelines. <sup>18</sup>	The Philippines does not have an outbound FDI screening, and there has been no public discussion on legislation to do so.		
South Korea	South Korea's Foreign Investment Promotion Act (FIPA) screens inbound investments in National "High-Tech Strategic Technologies." Foreign investors must notify or seek approval for investments, especially if they involve the acquisition of control or significant shareholdings (e.g., 50 percent or more) in companies with national core technologies, including those supported by government R&D. The government can review investments deemed of potential national security risk. <sup>19</sup>	South Korea has an outbound investment screening mechanism through Act on Prevention of Divulgence and Protection of Industrial Technology (APDPIT). This act authorizes the Industrial Technology Protection Committee (ITPC) to block outbound investments under the "national core technology" list, or technologies developed using government research or funding. <sup>20</sup>		

France is among the least restrictive countries for foreign investment. With a few exceptions in certain specified sectors, there are no statutory limits on foreign ownership of companies. <sup>21</sup>

France does not have an outbound FDI screening regime and as of writing appears to have no domestic plans to implement one.

#### France

France screens inbound FDI in sensitive sectors include those linked to national defense, critical infrastructure (energy, transport, water, communications), security services, research and development in critical technologies (such as cybersecurity, AI, semiconductors, biotechnologies).

It applies if three conditions are met: the investor qualifies as foreign, the investment involves acquiring control or at least 10 percent of a French entity's share capital (for listed companies), and the target entity operates in sensitive activities or sectors. The screening process has two phases: an initial month-long review and, if needed, a more detailed review lasting up to forty-five additional business days.<sup>22</sup>

Germany's Foreign Trade and Payments

Foreign Trade and Payments Ordinance

(AWV) includes a sector-specific screening

for acquisitions in defense and IT security

Law (Außenwirtschaftsgesetz) and the

sectors, and a broader cross-sector screening for other sectors.

Germany does not have an outbound FDI screening regime, and the government has not publicly discussed plans to implement one. There has been some speculation that outbound FDI screening could be a part of a forthcoming new German Investment Control Act (ICA) (Investitionsprüfgesetz) that adopts the nonbinding EU recommendations, but no concrete legislation has been enacted. <sup>24</sup>

## Germany

Foreign investors acquiring control of at least 10 percent in companies active in defense or IT security must notify the Federal Ministry for Economic Affairs and Climate Action (BMWK) for review. For other sectors, non-EU/EEA investors acquiring at least 25 percent voting rights can be screened. <sup>23</sup>

The National Security and Investment Act 2021 (NSIA) applies to both UK and foreign investors, with mandatory notification required for acquisitions in 17 sensitive sectors (e.g., defense, AI, critical technologies), requiring government approval before completion.

#### **United Kingdom**

The government can "call in" transactions for review up to five years after completion, or six months if the transaction is already known to authorities. <sup>25</sup>

NSIA also applies to outbound investments by UK persons if the acquisition involves a foreign entity or asset that has a relevant UK connection. This includes situations where the acquired foreign entity carries on activities in the UK or supplies goods or services to the UK, or where the acquired asset outside the UK is used in connection with activities or supply in the UK. <sup>26</sup>

The EU's FDI Screening Regulation (Regulation (EU) 2019/452) requires member states to establish screening mechanisms for foreign investments affecting security or public order into the EU. <sup>27</sup>

The European Union does not currently have a formal, mandatory outbound FDI screening regime. However, the EU is actively exploring future outbound controls across member states.

European Union A major reform was adopted by the European Parliament in May 2025 to harmonize and expand national screening regimes by which mandatory for all EU member states to have FDI screening mechanisms in place with a harmonized minimum set of sensitive sectors subject to mandatory filing and clearance.<sup>28</sup>

In January 2025, the European Commission issued a nonbinding Recommendation (EU 2025/63) advising EU Member States to review and monitor outbound investments by EU-based companies into third countries, specifically focusing on sensitive technology sectors such as semiconductors, artificial intelligence, and quantum technologies. The Recommendation asks Member States to gather information on outbound investments made from January 2021 to June 2026, covering acquisitions, mergers, greenfield investments, joint ventures, venture capital, and transfers of certain tangible and intangible assets including intellectual property.29

# Appendix 3: Critical Minerals Assessment Framework

#### **Batteries**

The production of advanced battery technologies for electrical vehicles, grid storage, drones, consumer electronics and tactical electronics require the following critical minerals:<sup>30</sup>

- Lithium (Li): acts as the charge carrier that moves between the anode and cathode during charging and discharging.
- Graphite (Gr): serves as the anode (negative electrode) material in lithium-ion batteries.
- Cobalt (Co): used in the cathode (positive electrode) of many lithium-ion batteries, especially in nickel-manganese-cobalt (NMC) and lithium-cobalt oxide (LCO) chemistries <sup>31</sup>
- Manganese Sulfate (MnSO<sub>4</sub>): a cathode component, commonly used in combination with nickel and cobalt in NMC batteries.
- Nickel Sulfate (NiSO<sub>4</sub>(H<sub>2</sub>O)<sub>6</sub>): cathode material, especially in NMC and NCA (nickel-cobalt-aluminum) batteries.<sup>32</sup>

#### **Magnets**

Rare earth permanent magnets are used across a wide variety of arms, including fighter aircraft and missile guidance systems, and for electric vehicles and offshore wind turbines.<sup>33</sup> Critical minerals used in production include:

- **Neodymium (Nd)**: core component in neodymium magnets (NdFeB), the strongest commercially available permanent magnets, used in electric vehicle motors, wind turbines, electronics for their compact size and performance.<sup>34</sup>
- Praseodymium (Pr): used as a partial substitute for neodymium in NdFeB magnets to reduce costs and avoid the need for separation, while maintaining similar magnetic properties.<sup>35</sup>
- **Dysprosium** (**Dy**): used as an additive to improve neodymium-iron-boron (neo) resistance to demagnetization and high temperature performance.<sup>36</sup>
- **Samarium (Sm)**: sssential element in samarium-cobalt (SmCo) magnets for thermal stability and corrosion resistance, such as aerospace, military, and high-speed motors.<sup>37</sup>
- **Cobalt (Co)**: key alloying element in both samarium-cobalt magnets and, in smaller amounts, as an additive in neodymium magnets.<sup>38</sup>

#### **Advanced Semiconductors (Chips)**

While many critical minerals are used in the production of silicon-based semiconductors, we have chosen the four below which have been assessed to be important for industrial production, have no readily available substitutes, and the U.S. supply is reliant on imports from foreign adversaries.<sup>39</sup>

- Gallium (Ga): used for high performance compound semiconductors, especially gallium arsenide (GaAs) and gallium nitride (GaN).<sup>40</sup>
- **Germanium (Ge)**: used for high-speed transistors in computer processors, infrared detectors, communication systems, and radar systems requiring a high electron mobility material. Also used for fiber-optic cables.
- Palladium (Pd): used for plating in connectors and contacts due to its excellent conductivity and resistance to corrosion.<sup>41</sup>
- **Silicon (Si)**: primary element in semiconductors.

#### **Arms Production**

The U.S. defense industrial base relies on a wide range of critical minerals to sustain arms production. We have focused on the five below due to U.S. dependence on foreign sources or being designated by NATO as being of key importance.<sup>42</sup>

- Yttrium (Y): used for stabilized ceramics in aircraft engines, radar systems and highstrength alloys.<sup>43</sup>
- Tantalum (Ta): fighter aircraft engines, missiles, artillery, armor piercing munitions
- **Beryllium (Be)**: satellite optics, targeting sensors, inertial navigation, gyroscopes, and missile seekers due to their stiffness, light weight, and heat conductivity.<sup>44</sup>
- Tungsten (W): kinetic penetrators, missile stabilization systems, drone-dropped munitions, and hypersonic systems.<sup>45</sup>
- **Titanium** (**Ti**): wide-ranging applications including aerospace structures, body and vehicle armor, and missiles.
- Antimony (Sb): used in munitions, electronics, and military-grade batteries.
- **Platinum (Pt)**: used in electronics, sensors, and catalysts.

### **Notes**

- 1 "National Security Strategy," Biden White House Archives, October 2022, <a href="https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf">https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf</a>.
- Janet Yellen, "Remarks by Secretary of the Treasury Janet L. Yellen on the U.S.-China Economic Relationship at Johns Hopkins School of Advanced International Studies," U.S. Department of the Treasury, 2023, https://home.treasury.gov/news/press-releases/jy1425
- 3 "The Nomination of Hon. Marco Rubio to be U.S. Secretary of State," Committee on Foreign Relations, January 15, 2025, <a href="https://www.foreign.senate.gov/imo/media/doc/6df93f4b-a83c-89ac-0fac-9b586715afd8/01%2015%2025%20Nominations%20--%20Rubio.pdf">https://www.foreign.senate.gov/imo/media/doc/6df93f4b-a83c-89ac-0fac-9b586715afd8/01%2015%2025%20Nominations%20--%20Rubio.pdf</a>.
- 4 "Analysis for CHIPS Act and BIA Briefing" U.S. Department of Commerce, April 6, 2022, <a href="https://www.commerce.gov/news/press-releases/2022/04/analysis-chips-act-and-bia-briefing">https://www.commerce.gov/news/press-releases/2022/04/analysis-chips-act-and-bia-briefing</a>.
- 5 Richard Elkus Jr., "A Strategy for The United States to Regain Its Position in Semiconductor Manufacturing," Center for Strategic and International Studies, February 13, 2024, <a href="https://www.csis.org/analysis/strategy-united-states-regain-its-position-semiconductor-manufacturing">https://www.csis.org/analysis/strategy-united-states-regain-its-position-semiconductor-manufacturing</a>.
- Daniel F. Runde and Austin Hardman, "Elevating the Role of Critical Minerals for Development and Security," Center for Strategic and International Studies, September 1, 2023, <a href="https://www.csis.org/analysis/elevating-role-critical-minerals-development-and-security">https://www.csis.org/analysis/elevating-role-critical-minerals-development-and-security</a>.
- Jamie Smythe and Myles McCormick, "Western Nations Join Forces to Break China's Grip on Critical Minerals," National Mining and Related Industries Day, September 24, 2024, <a href="https://www.miningday.com.au/western-nations-join-forces-to-break-chinas-grip-on-critical-minerals/">https://www.miningday.com.au/western-nations-join-forces-to-break-chinas-grip-on-critical-minerals/</a>.
- 8 "Critical Materials: Action Needed to Implement Requirements That Reduce Supply Chain Risks," U.S. Government Accountability Office, September 12, 2024, <a href="https://www.gao.gov/products/gao-24-107176">https://www.gao.gov/products/gao-24-107176</a>.
- 9 Jake Sullivan, "Remarks by APNSA Jake Sullivan in Press Conference," 2024.
- "Technology Competition: A Progressive, Principled, and Pragmatic Approach Toward China," Center for American Progress, April 11, 2024, <a href="https://www.americanprogress.org/article/a-progressive-principled-and-pragmatic-approach-toward-china-policy/technology-competition-a-progressive-principled-and-pragmatic-approach-toward-china/">https://www.americanprogress.org/article/a-progressive-principled-and-pragmatic-approach-toward-china-policy/technology-competition-a-progressive-principled-and-pragmatic-approach-toward-china/</a>.

- 11 Terri Moon Cronk, "Testimony: DOD Is Laser Focused on China Pacing Challenge, Meeting Our Commitments Under Taiwan Relations Act," U.S. Department of Defense, December 8, 2021, <a href="https://www.war.gov/News/News-Stories/Article/Article/2867003/testimony-dod-is-laser-focused-on-china-pacing-challenge-meeting-our-commitment/">https://www.war.gov/News/News-Stories/Article/Article/2867003/testimony-dod-is-laser-focused-on-china-pacing-challenge-meeting-our-commitment/</a>.
- 12 Stewart Patrick, "The Death of the World America Made," Carnegie Endowment for International Peace, February 19, 2025, <a href="https://carnegieendowment.org/emissary/2025/02/trump-executive-order-treaties-organizations?lang=en">https://carnegieendowment.org/emissary/2025/02/trump-executive-order-treaties-organizations?lang=en</a>.
- 13 Michael Pence, "Remarks by Vice President Pence on the Administration's Policy Toward China," White House, October 4, 2018, <a href="https://trumpwhitehouse.archives.gov/briefings-statements/remarks-vice-president-pence-administrations-policy-toward-china/">https://trumpwhitehouse.archives.gov/briefings-statements/remarks-vice-president-pence-administrations-policy-toward-china/</a>.
- 14 "Australia's Foreign Investment Policy," Australian Government: Department of Foreign Affairs and Trade (DFAT), 2024, <a href="https://www.dfat.gov.au/trade/investment/australias-foreign-investment-policy">https://www.dfat.gov.au/trade/investment/australias-foreign-investment-policy</a>.
- "Defence Trade Controls Amendment Act 2024," Australian Government Defence, March 27, 2024, https://www.defence.gov.au/about/reviews-inquiries/defence-trade-controls-amendment-act-2024-defence-trade-legislation-amendment-regulations-2024.
- "Japan—Adds Nine Sectors to the FDI Screening Regime," UNCTAD Investment Policy Monitor, 2024, <a href="https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4294/adds-nine-sectors-to-the-fdi-screening-regime">https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4294/adds-nine-sectors-to-the-fdi-screening-regime</a>.
- 17 Thilo Hanemann, et al., "An Outbound Investment Screening Regime for the United States?," report by US China Investment Project, Rhodium Group, and National Committee on U.S.—China Relations, January 2022, https://rhg.com/wp-content/uploads/2022/01/RHG\_TWS\_2022\_US-Outbound-Investment.pdf.
- William Yuen Yee, "How the Philippines Screens Foreign Investments," Lawfare, December 12, 2024, <a href="https://www.lawfaremedia.org/article/how-the-philippines-screens-foreign-investments">https://www.lawfaremedia.org/article/how-the-philippines-screens-foreign-investments</a>.
- 19 "Republic of Korea: Foreign Direct Investment Reviews 2025," White & Case LLP, 2025, <a href="https://www.whitecase.com/insight-our-thinking/foreign-direct-investment-reviews-2025-republic-of-korea">https://www.whitecase.com/insight-our-thinking/foreign-direct-investment-reviews-2025-republic-of-korea</a>.
- 20 "Strengthens the Security Review of Foreign Investments," UNCTAD Investment Policy Monitor, 2025, <a href="https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4788/strengthens-the-security-review-of-foreign-investments-">https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4788/strengthens-the-security-review-of-foreign-investments-</a>.
- 21 "2024 Investment Climate Statements: France," U.S. Department of State, February 2024, <a href="https://www.state.gov/reports/2024-investment-climate-statements/france/">https://www.state.gov/reports/2024-investment-climate-statements/france/</a>.
- 22 "France: Foreign Investment Rules," Ministère de l'Économie, des Finances et de la Souveraineté Industrielle et Numérique, 2024, <a href="https://www.tresor.economie.gouv.fr/Articles/5ed19b2a-8ff9-40bf-88a8-172679985561/files/fa02c7b0-bffd-4898-920a-05d30490000b">https://www.tresor.economie.gouv.fr/Articles/5ed19b2a-8ff9-40bf-88a8-172679985561/files/fa02c7b0-bffd-4898-920a-05d30490000b</a>.
- Germany's Foreign Investment Regime," Pinsent Masons, 2024, <a href="https://www.pinsentmasons.com/out-law/guides/germanys-foreign-investment-regime">https://www.pinsentmasons.com/out-law/guides/germanys-foreign-investment-regime</a>.
- 24 "Germany Expected to Tighten Grip on FDI," Bird & Bird, 2024, <a href="https://www.twobirds.com/en/insights/2024/germany/germany-expected-to-tighten-grip-on-fdi">https://www.twobirds.com/en/insights/2024/germany/germany-expected-to-tighten-grip-on-fdi</a>.
- "Check if an Acquisition Outside the UK Will Be in Scope of the National Security and Investment Act," UK Cabinet Office, 2025, <a href="https://www.gov.uk/government/publications/check-if-an-acquisition-outside-the-uk-will-be-in-scope-of-the-national-security-and-investment-act/check-if-an-acquisition-of-an-entity-or-asset-outside-the-uk-that-you-are-involved-in-could-be-assessed-by-the-government-for-national-security-risks#types-of-acquisitions-that-are-covered-by-the-rules.</a>
- 26 Ibid.

- 27 "Investment Screening," European Commission on Trade and Economic Security, 2024, <a href="https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening\_en">https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening\_en</a>.
- Helene Schramm, "CELIS Update on Investment Screening and Economic Security, May 2025," CELIS Institute, 2025, <a href="https://www.celis.institute/celis-news/celis-update-on-investment-screening-and-economic-security-may-2025/">https://www.celis.institute/celis-news/celis-update-on-investment-screening-and-economic-security-may-2025/</a>.
- 29 Council Recommendation (EU) 2025/63, EUR-Lex, 2025, https://eur-lex.europa.eu/eli/reco/2025/63/oj/eng.
- 30 Brandon S. Tracy, "Critical Minerals in Electric Vehicle Batteries," Congressional Research Service, August 29, 2022, <a href="https://www.congress.gov/crs-product/R47227">www.congress.gov/crs-product/R47227</a>; "Department of Defense to Prototype Commercial Lithium Batteries for Soldier," Defense Innovation Unit, December 7, 2023, <a href="https://www.diu.mil/latest/department-of-defense-to-prototype-commercial-lithium-batteries-for-soldier">www.diu.mil/latest/department-of-defense-to-prototype-commercial-lithium-batteries-for-soldier</a>.
- 31 Teresa Insinna et al., "Graphite Anodes for LiIon Batteries: An Electron Paramagnetic Resonance Investigation," *Chemistry of Materials* 35, no. 14 (July 13, 2023): 5497–5511, <a href="https://pubs.acs.org/doi/10.1021/acs.chemmater.3c00860">https://pubs.acs.org/doi/10.1021/acs.chemmater.3c00860</a>; Stéphane Melançon, "Comparing Six Types of Lithium-Ion Battery and Their Potential for BESS Applications," Energy Storage News, 2021, <a href="https://www.energy-storage.news/comparing-six-types-of-lithium-ion-battery-and-their-potential-for-bess-applications/">https://www.energy-storage.news/comparing-six-types-of-lithium-ion-battery-and-their-potential-for-bess-applications/</a>.
- 32 "NMC vs NCA Battery Cell: What's the Difference?," *Grepow Blog*, <a href="www.grepow.com/blog/nmc-vs-nca-battery-cell-what-is-the-difference.html">www.grepow.com/blog/nmc-vs-nca-battery-cell-what-is-the-difference.html</a>.
- 33 "U.S. Department of Commerce Announces Section 232 Investigation into the Effect of Imports of Neodymium Magnets on U.S. National Security," U.S. Department of Commerce, September 22, 2021, www.commerce.gov/news/press-releases/2021/09/us-department-commerce-announces-section-232investigation-effect.
- Braeton J. Smith et al., "Rare Earth Permanent Magnets Supply Chain Deep Dive Assessment," *U.S. Department of Energy*, February, 2022, <a href="https://www.energy.gov/sites/default/files/2024-12/Neodymium%2520Magnets%2520Supply%2520Chain%2520Report%2520-%2520Final%5B1%5D.pdf">https://www.energy.gov/sites/default/files/2024-12/Neodymium%2520Magnets%2520Supply%2520Chain%2520Report%2520-%2520Final%5B1%5D.pdf</a>.
- 35 "Unlocking the Uses of Praseodymium: Key Applications Driving Innovation Across Industries," *Advanced Engineering Materials*, February 14, 2025, <a href="https://www.aemree.com/news/uses-of-praseodymium.html">www.aemree.com/news/uses-of-praseodymium.html</a>.
- 36 Steve Constantinides, "The Important Role of Dysprosium in Modern Permanent Magnets," *Arnold Magnetic Technologies*, Rev. 150903a, September 2015, <a href="www.arnoldmagnetics.com/wp-content/uploads/2017/10/Important-Role-of-Dysprosium-in-Modern-Permanent-Magnets-150906.pdf">www.arnoldmagnetics.com/wp-content/uploads/2017/10/Important-Role-of-Dysprosium-in-Modern-Permanent-Magnets-150906.pdf</a>.
- 37 Keith Bradsher, "China's Chokehold on This Obscure Mineral Threatens the West's Militaries," New York Times, June 9, 2025, www.nytimes.com/2025/06/09/business/china-rare-earth-samarium-fighter-jets.html.
- 38 "Toshiba Develops Dysprosiumfree SamariumCobalt Magnet to Replace Heatresistant Neodymium Magnet in Essential Applications," *Toshiba*, August 16, 2012, accessed July 30, 2025, <a href="https://www.global.toshiba/ww/news/corporate/2012/08/pr1601.html">https://www.global.toshiba/ww/news/corporate/2012/08/pr1601.html</a>.
- 39 Gracelin Baskaran and Meredith Schwartz, "From Mine to Microchip: Addressing Critical Mineral Supply Chain Risks in Semiconductor Production," Center for Strategic and International Studies, October 7, 2024, https://www.csis.org/analysis/mine-microchip.
- 40 Sujai Shivakumar, Julia Yoon, and Tisyaketu Sirkar, "Gallium Nitride: A Strategic Opportunity for the Semiconductor Industry," Center for Strategic and International Studies, May 20, 2024, <a href="https://www.csis.org/analysis/gallium-nitride-strategic-opportunity-semiconductor-industry">https://www.csis.org/analysis/gallium-nitride-strategic-opportunity-semiconductor-industry</a>.
- 41 "Benefits of Electroplating Palladium for Electrical Connectors," *American Electro Products*, September 20, 2024, <a href="https://www.americanelectro.com/benefits-of-electroplating-palladium-for-electrical-connectors">https://www.americanelectro.com/benefits-of-electroplating-palladium-for-electrical-connectors</a>.

- 42 "Critical Materials: Action Needed to Implement Requirements That Reduce Supply Chain Risks: Q & A Report to Congressional Committees," GAO24107176, U.S. Government Accountability Office, September 10, 2024, <a href="https://www.gao.gov/products/gao-24-107176">https://www.gao.gov/products/gao-24-107176</a>; "NATO Releases List of 12 Defence-critical Raw Materials," NATO, December 11, 2024, <a href="https://www.nato.int/cps/en/natohq/news-231765.htm">https://www.nato.int/cps/en/natohq/news-231765.htm</a>.
- 43 "Yttrium," *ScienceDirect Topics*, Elsevier, accessed July 30, 2025, <a href="https://www.sciencedirect.com/topics/materials-science/yttrium">https://www.sciencedirect.com/topics/materials-science/yttrium</a>.
- "Critical Minerals in Defence and National Security," SFA Oxford, accessed July 30, 2025, <a href="https://www.sfa-oxford.com/knowledge-and-insights/critical-minerals-in-low-carbon-and-future-technologies/critical-minerals-in-defence-and-national-security/">https://www.sfa-oxford.com/knowledge-and-insights/critical-minerals-in-low-carbon-and-future-technologies/critical-minerals-in-defence-and-national-security/</a>.
- Charles W. Schmidt, "No Magic Bullet: Tungsten Alloy Munitions Pose Unforeseen Threat," *Environmental Health Perspectives* 113, no. 6 (2005): A403, <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC1257635/">https://pmc.ncbi.nlm.nih.gov/articles/PMC1257635/</a>.