FACT SHEET: Biden-Harris Administration Announces Further Actions to Secure Rare Earth Element Supply Chain

Department of Commerce Findings and Recommendations Build on Progress to Secure Critical Supply Chain, Reduce Dependence on China

The Biden-Harris Administration is strongly committed to securing U.S. supply chains for critical goods. Neodymium-iron-boron (NdFeB) permanent magnets are strong magnets made of rare earth elements that are critical to the functioning of defense systems, as well as clean energy technologies such as electric vehicle motors and wind turbines. The United States used to lead the world in rare earth element production. However, over the last three decades, the People's Republic of China (PRC) has captured nearly the entire supply chain, and it currently has nearly 60 percent of mined production, over 85 percent of processing capacity, and over 90 percent of permanent magnet production.

Since day one in office, President Biden has focused on building resilient and diverse supply chains essential to our national security, our economic security, and our competitiveness. In February 2021, President Biden signed Executive Order 14017 on America's Supply Chains, which directed a 100-day review of the supply chains for critical minerals, including rare earth elements. As part of the actions directed by the President to address vulnerabilities in critical minerals supply chains, the Secretary of Commerce ("Secretary") conducted an investigation under section 232 of the Trade Expansion Act of 1962, as amended ("Section 232"). This was the first Section 232 investigation initiated under the Biden-Harris Administration. The investigation found that NdFeB magnet imports threaten national security as defined in the statute. The President concurs with the Secretary's finding.

The Secretary's report notes that the United States, as well as our allies and partners, are highly dependent on imports from China, and that the nascent domestic NdFeB magnet industry faces significant barriers to reaching its production targets, including unfair Chinese practices. The report further noted that U.S. consumption of NdFeB magnets is forecast to more than double from 2020 to 2030, driven by increased demand from electric vehicles and wind energy industries.

To mitigate the national security threat from foreign imports, the Biden-Harris Administration will implement Commerce's recommendations including bolstering domestic production throughout the supply chain, promoting demand for U.S.-produced magnets, engaging with allies and partners on supply chain resilience, supporting the development of a highly-skilled workforce, and supporting research to mitigate supply chain vulnerabilities, along with other efforts. In addition, to ensure continued support for the domestic NdFeB magnet industry in face of unfair competition from China, the Biden-Harris Administration will continue to monitor the domestic supply chain and take appropriate actions.

At the recommendation of the Secretary of Commerce provided in the Department of Commerce report, the Biden-Harris Administration will take further action to secure a resilient NdFeB magnet supply chain:

Support Domestic Production and Supply of NdFeB Magnets: While Commerce found that domestic capacity for NdFeB magnets is currently sharply limited, multiple companies intend to establish domestic capacity at different steps of the NdFeB magnet value chain due to strategic investments spurred by the Biden-Harris Administration. If successful, according to the report's findings, import penetration of the magnets could decline significantly by 2026.

- President Biden's landmark Inflation Reduction Act (IRA) incentivizes the domestic manufacturing of onshore and offshore wind components, including NdFeB magnets. Under the IRA, U.S. manufacturers will be eligible to receive tax credits for NdFeB magnet production, strengthening our energy, jobs, and economic security.

- Subject to the availability of funds of the President's Fiscal Year 2023 Budget Request, the Department of Defense Industrial Base Analysis and Sustainment ("IBAS") program will support alloying and metallization production. This would facilitate the development of a holistic domestic NdFeB magnet value chain. According to the Section 232 report, alloy and metal production are anticipated to be weak links in the future U.S. NdFeB magnet value chain.

- Subject to the availability of funds of the President's Fiscal Year 2023 Budget Request, the Department of Defense's Defense Production Act ("DPA") Title III program will support NdFeB magnet manufacturing. These efforts will target merchant suppliers who can meet both Department of Defense and commercial needs for permanent, sintered NdFeB magnets. Investment in commercial-scale manufacturers will create additional resiliency to the future NdFeB value chain.

- Subject to the availability of funds and approval of the President's Fiscal Year 2023 Budget Request, the National Defense Stockpile will support further purchases of NdFeB magnets and constituent materials, and explore whether to include a commercial buffer for select essential civilian and critical infrastructure sectors, which could strengthen supply chain resilience in the event of disruptions.

- Member agencies of the National Science and Technology Council's Critical Minerals Subcommittee, as appropriate, will encourage eligible U.S. NdFeB magnet industry participants, including NdFeB magnet manufacturers and producers at upstream and downstream steps in the value chain, to apply for financing for export-oriented domestic and manufacturing projects from the Export-Import Bank of the United States (EXIM) through the Make More in America Initiative.

Support Domestic Demand: Industry stakeholders have cited uncertainty over both potential sources of domestic supply and inconsistent demand for domestic magnets as risks to the emerging U.S. NdFeB magnet value chain. Providing consistent domestic commercial demand is critical to the development of a domestic industry.

- The Department of Commerce's National Institute of Standards and Technology (NIST), in consultation with the Critical Minerals Subcommittee of the National Science and Technology Council, will convene relevant agencies, standards development experts, and private sector stakeholders (including leveraging International Trade Administration industry expertise and the ongoing work of advisory committees such as the Advisory Committee on Supply Chain Competitiveness) to develop a strategy for improving domestic recovery and reprocessing of NdFeB magnets as part of NIST's Circular Economy Program.

Multilateral Engagement on Critical Minerals: Shared vulnerabilities underscore the value of ongoing multilateral and bilateral engagements on critical minerals supply chain resilience. Continued engagement with partners and allies, including through the Partnership for Global Infrastructure and Investment, is critical to reducing our collective dependence on China for NdFeB magnets and constituent critical minerals.

- The Department of Energy will enhance ongoing engagement and collaboration regarding rare earths through the Conference on Critical Minerals and Materials, which coordinates existing research and development and policy work, and include the United States, Japan, the European Union, Australia and Canada. The Department of Energy will work with the Departments of Commerce and State to facilitate collaboration opportunities, and more specifically prioritize advancement of rare earth processing capabilities.

- The Department of State will, through the Minerals Security Partnership, encourage allies, partners and commercial industry to explore (a) whether medium- or long-term loans from the EXIM, particularly through the China and Transformational Exports Program, may offer opportunities to utilize U.S. goods and service exports and (b) whether financing and equity programs from the U.S. International Development Finance Corporation may help transition the supply chains of the United States and allies.

Workforce Development: Current and potential domestic producers cited as significant impediments the challenges in finding qualified and experienced engineers and scientists as well as qualified and experienced production line workers.

- The Department of Commerce's Economic Development Administration (EDA) will engage with eligible entities, such as higher education institutions and local governments in distressed communities, including coal communities, to share grant opportunities for developing and strengthening training programs or facilities related to NdFeB magnet manufacturing, such as materials science. Relevant programs include EDA's Public Works and Economic Adjustment Assistance programs.

- The Department of Labor's Employment and Training Administration and Good Jobs Initiative will engage with interested parties – including employers, education and training centers, higher education institutions, worker centers and labor, community-based organizations and others – to discuss methods of building an equitable, highly-skilled and sustainable NdFeB magnet workforce through proven programs like pre-apprenticeship and Registered Apprenticeship.

Research to Mitigate Supply Chain Vulnerabilities: Innovative solutions are needed to address both near-term challenges and provide the scientific and technological groundwork to address mid-to-long-term challenges in the NdFeB magnet supply chain.

The Department of Energy will continue to fund research that seeks to:

- Diversify and expand the supply of rare earth elements from a wide range of sources that are economically viable and minimize environmental impact, including the co-production[1] of rare earth elements;

- Develop alternative magnet materials, manufactured magnets, and end-use technologies that minimize or eliminate the use of rare earth elements or NdFeB magnets, while utilizing materials with assured supply;

- Increase material and manufacturing efficiency across the supply chain, including efficient use and processing, as well as extending the lifetime of materials; and

- Promote a circular economy to remanufacture, refurbish, repair, reuse, recycle, and downcycle materials and components, while incentivizing collection.

Continue to Monitor the NdFeB Magnet Value Chain: To ensure that the nascent U.S. NdFeB magnet industry survives, the U.S. Government should remain cognizant of the health of the industry and the effects of Chinese competition. The Biden-Harris Administration will continue to monitor the NdFeB magnet value chain to ensure that U.S. and ally firms are not adversely impacted by non-market factors or unfair trade actions. The Department of Commerce found that the domestic NdFeB magnet production decreased significantly in the 1990s and early 2000s in part because of Chinese policies such as tax rebates and subsidies as well as intellectual property infringement.

- The Department of Commerce and the Office of the U.S. Trade Representative will assess the U.S. and global NdFeB magnet value chain to determine whether additional actions should be undertaken to counteract non-market policies or practices or other unfair trade practices.

[1] Co-production refers to cases where many materials are produced together, each bringing in similar revenues rather than one material accounting for an overwhelming majority of revenue.

- The Department of Commerce, in consultation with the Critical Minerals Subcommittee of the National Science and Technology Council, will periodically assess the health of the U.S. NdFeB magnet industrial base, including the status and outlook of production throughout the value chain, the existing and anticipated workforce availability, the impact of non-market factors, the resilience of the supply chain, and other relevant factors.

These efforts will build upon the historic actions already taken under the Biden-Harris Administration to strengthen the U.S. rare earth element and magnet supply chain:

- Through the DPA and IBAS programs, the Department of Defense has invested nearly $200 million to increase domestic rare earth element separation capacity and NdFeB magnet manufacture in leading rare earth companies: MP Materials, Lynas Rare Earths, and Noveon Magnetics.

    - This investment generated a further $700 million in investment from MP Materials, which operates the only rare earth mine in the United States. in Mountain Pass, California, to secure a fully American end-to-end supply chain for NdFeB magnets.

    - In February 2022, MP Materials broke ground on a rare earth material, metal, and magnet manufacturing facility in Texas, which is projected to produce enough NdFeB magnets to power 500,000 electric vehicles annually at full production.

- In June 2022, USA Rare Earth announced a $100 million investment in a rare earth material, metal, and magnet manufacturing facility in Stillwater, Oklahoma.

- In February 2022, the Department of Energy, with funding from the Bipartisan Infrastructure Law, issued a request for information for the design, construction, and build-out of a $140 million facility to demonstrate the commercial feasibility of a full-scale integrated rare earth extraction and separation facility and refinery from coal ash, mine waste, and other unconventional sources.