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Securitization of Critical Minerals: Toward Enhancement of Japan-U.S. Cooperation

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The escalation of U.S.-China rivalry reminds us of the fact that international struggles among big powers and energy markets are inextricably linked. The linkage between securing critical minerals, including rare earths, and energy is such a typical case.

There are uncertainties regarding whether the post-Trump U.S. administration will keep shifting away from clean energy or return to clean energy to some degree down the road. Even in the former case, however, it is no longer realistic to reject fossil fuels in an "extreme" manner, as the Biden administration aimed to do at least in the short to medium term against the backdrop of the heavy dependency on China for critical minerals which are not only indispensable for enhancement of introducing renewables, requiring wind turbines, solar panels and storage batteries, but also are dual-use.

Today, the perception of China as a threat is gaining momentum across party lines in the United States. If the United States is to once again actively promote international adoption of clean energy, including renewables, it is essential to diversify and strengthen the resilience of critical minerals supply chains, including significantly reducing dependence on China. It would, however, require a considerable amount of time. Otherwise, with the world gradually divided, China will likely expand its international influence by promoting the adoption of clean energy equipment. Traditional energy security has addressed the weaponization of fossil fuels like oil and natural gas. However, as Jason Bordoff (Columbia University Professor) and Megan L. O'Sullivan (Harvard University Professor) argue in their "The Resurgence of Energy Weapons," published in Foreign Affairs, we must now factor in China's growing capacity to advance the "weaponization of clean energy."

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The U.S. Energy Act of 2020 defines critical minerals as "those that are essential to the economic or national security of the United States." However, warnings are now sounding that they represent "America's Most Dangerous Dependence." For the 50 critical minerals designated by the U.S. Geological Survey (USGS) under the U.S. Department of the Interior, as of 2024, the United States relies on China for over 80% of its imports for 16 minerals. Furthermore, for six minerals, the United States depends entirely on China for 100% of its imports. China is the largest supplier of nearly all 12 critical minerals essential to the U.S. defense industry. "Ensuring National Security and Economic Resilience through Section 232 Actions on Processed Critical Minerals and Derivatives" (dated April 15, 2025) notes that U.S. reliance on a small number of foreign suppliers for processed critical minerals and derivatives exposes it to vulnerabilities in global supply chains and market distortions, increasing risks to national security and economic prosperity and resilience.

According to the <u>Fact Sheet</u> released by the White House on November 1, China agreed at the U.S.-China summit in Busan on October 30 to cease export restrictions, announced on October 9, 2025, with regard to critical minerals, including rare earths and graphite, not only to the United States but to the entire world. China's Ministry of Commerce announced on <u>November 7</u> that it would temporarily suspend export restrictions on certain rare earth elements, and on <u>November 9</u>, on gallium, germanium, antimony, and other materials. However, each suspension carries a one-year time limit, signaling a hardline stance by leaving open the possibility of reinstating export restrictions depending on the outcome of the standoff with the United States.

At the G7 Energy and Environment Ministers' Meeting, held in Toronto on October 30-31, the leaders condemned "the use and manipulation of the supply of energy, critical minerals, and energy system technologies, as a tool of economic coercion, specifically through the adoption of non-market policies and practices such as market manipulation," with China effectively in mind. They also explicitly stated the need to reduce and ultimately eliminate dependence on these supply chains.

At the Japan-U.S. summit meeting held in Tokyo on the 28th of the same month, "<u>Japan-United States Framework For Securing the Supply of Critical Minerals and Rare Earths through Mining and Processing</u>," signed by Prime Minister Sanae Takaichi and President Donald Trump, indicated that in addition to strengthening the bilateral supply

chain between Japan and the U.S., the two countries share the intention to cooperate with third parties as necessary.

Japan and the United States have already <u>agreed</u> to explore the construction of copper smelting and refining facilities in the western United States and the involvement of Japanese suppliers or off-takers. Furthermore, on <u>November 6</u>, Prime Minister Takaichi stated during a House of Councillors representative question session that she intends to seek specific ways to cooperate with the United States regarding the potential for rare earth development around Minamitorishima.

The Alaska LNG project is currently attracting significant attention as one of the flagship cooperative projects between the two countries. However, it would also be worthwhile to explore potential cooperation in developing Alaska's critical mineral resources. Alaska, which the United States particularly values from geopolitical and military perspectives, holds the majority of the critical mineral resources Japan seeks to secure for a stable supply. On September 20, the U.S. Department of War announced a \$43.4 million award to Alaska Range Resources, LLC under the Defense Production Act. This award supports antimony production (including refining processes) pursuant to Presidential Executive Order 14241, "Immediate Measures to Increase American Mineral Production," dated March 20, 2025.

Besides, Japan is encouraged to actively pursue possibilities for Japan-U.S. cooperation involving third countries. This includes promoting policy coordination with nations that share the vision of a "Free and Open Indo-Pacific" emphasized by the Takaichi administration, particularly Australia. On October 20, the leaders of the United States and Australia agreed to establish a "Framework for Securing of Supply in the Mining and Processing of Critical Minerals and Rare Earth. Japan also agreed with Australia at their summit meeting on October 26, held in Kuala Lumpur, to advance concrete cooperation in the field of economic security, including critical mineral supply chains.

Central Asia could be another potential candidate region for exploring Japan-U.S. cooperation on critical minerals. The region holds <u>significant reserves</u> of numerous critical minerals, including 40% of the world's manganese, 30% of chromium, and 20% of lead. However, Chinese companies currently dominate the entire supply chain from upstream to downstream, making it an <u>impending issue</u> for the regional countries to seek

third parties in order to diversify the participants. At the C5+1 (Central Asia's five countries plus the U.S.) summit held in Washington, D.C. on November 6, President Trump emphasized that critical minerals are a <u>top priority</u>. <u>Secretary of State Rubio</u> has announced plans to visit those countries (Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan) in 2026. Over the past two decades, Japan has been the most proactive Western nation in supporting economic development and capacity building of human resources in the region. Based on experience, pursuing <u>cooperation with the United States</u> could also be an option, given that the United States has <u>reaffirmed</u> its commitment to advancing the C5+1 Critical Minerals Dialogue, which began in February 2024.

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