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# Korea urged to boost ties with Australia to cut dependence on China

*Australian firm processes rare earth elements here as Korea diversifies supply chains*

Interview

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Korea has been strengthening ties with Australia to produce rare earth elements and decrease its high dependence on China, as core minerals for high-tech industries are becoming increasingly important.

Although Korea is currently dependent on China for rare earth elements, Rowena Smith, CEO of Australia-based critical metals producer ASM, said the company has been strengthening relations in order to provide a stable supply of core minerals to Korean companies.

"Our engagement with the Korean industry, government and research institutions goes back many years, as we have collaborated on technology for the production of high-tech metals," Smith told The Korea Times in a recent email interview.

"In our experience, Australia's and Korea's business culture and shared values make us perfect partners to develop our business, using Australian natural resources and Korea's access to skills and technology," she added.

For years, ASM has been conducting the Dubbo project, which mines minerals such as rare earth elements from mines in Dubbo, New South Wales, Australia and processes them in Korea. Australia has the world's sixth-largest deposit of rare earth elements of 3.27 million tons, after China, Vietnam, Brazil and Russia.

ASM said the Dubbo project serves as a sustainable and reliable source of core minerals such as rare earth elements, meeting the skyrocketing demand for these materials in the global market.

Since 2022, the company has been operating its mineral processing plant, KSM Metals, in the Korean city of Ochang in North Chungcheong Province.

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ASM CEO Rowena Smith, right, and KSM Metals CEO Cho Sung-lea stand next to PrNd metal products used for rare earth element permanent magnet manufacturing at KSM Metals plant in Ochang, North Chungcheong Province in this photo provided by ASM. Courtesy of ASM

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## Australia

"We have a vertically integrated 'mine-to-metals' strategy focused on two key projects: a planned rare earths and critical minerals mine in New South Wales in Australia and a processing operation at our Korean Metals plant in Ochang. We collaborate closely with industry, research institutions and the government to help Korea secure the critical minerals, rare earths and high-tech metals it needs for its manufacturing industries," the CEO said.

Rare earth elements are a set of 17 metallic elements essential for producing IT products such as smartphones, PCs, displays and renewable energy generation devices, as well as high-tech weapons. But due to their small reserves around the world, they also cause conflict between countries because China is their largest producer.

Smith estimated that securing a stable supply of rare earth elements has become a priority for many countries given that the critical metals will be increasingly used in eco-friendly energy business as well.

"We know that with the global push to deliver Net Zero by 2050, we need to electrify the world's energy system quickly, and that means an exponential scaling up of the production of electric vehicles, wind turbines and a host of other clean energy technologies. To do this, we need a more diverse, secure and reliable supply chain of metals such as neodymium, praseodymium, dysprosium and terbium — and that supply chain needs a lot more capacity," she said.

"The global critical minerals supply chain that feeds the production of permanent magnets and other critical metals products is highly concentrated, lacks transparency and carries significant risks for participants — particularly for the end users of the metals products derived from critical minerals. Our vision is to become an integrated global producer of rare earths, critical minerals and high-tech metals to help solve the supply chain challenges," Smith added.

Smith said it chose to work with Korea to process rare earth elements, because ASM was able to work closely with the Korean government, state-run agencies and companies.

"Ochang is a strategically important location for KSM, in the heart of an important manufacturing and technology precinct, which provides us with access to manufacturers and downstream customers who have a need for the high-tech metals that can be produced at our Korean Metals Plant. This enables us to collaborate with them on product development and technical work to refine our product suite to suit their needs," she said.

"We are absolutely delighted to have Hyundai Engineering engaged to deliver Engineering, Procurement and Construction Definition work for the Dubbo Project, ahead of a final investment decision. We were pleased to welcome NS World in September as the first customer of the KMP, with their purchase of neodymium/praseodymium metal ingot from the plant. Earlier this year we also welcomed the KCF Energy as an investor in ASM, with their $15-million equity investment in our company," the CEO further mentioned adding that the company has "entered into agreements with the Korean Mine Rehabilitation and Resource Corporation; the Korean Development Bank and North Chungcheong Province to establish secure supplies of rare earths and critical minerals into Korea."

Besides working with Australia, the Korean government is looking for various alternative supply chains to diversify the sources of minerals for high-tech industries.

On Dec. 5, when the presidents of Korea and Vietnam met for a summit in Seoul, the Ministry of Trade, Industry and Energy announced it also signed an agreement with its Vietnamese counterpart, the Ministry of Industry and Trade, to expand cooperation in core minerals including rare earth elements.

The two ministers agreed to explore and develop core minerals in Vietnam and to promote investments, stabilizing the global supply chains of the substances.