December 18, 2024

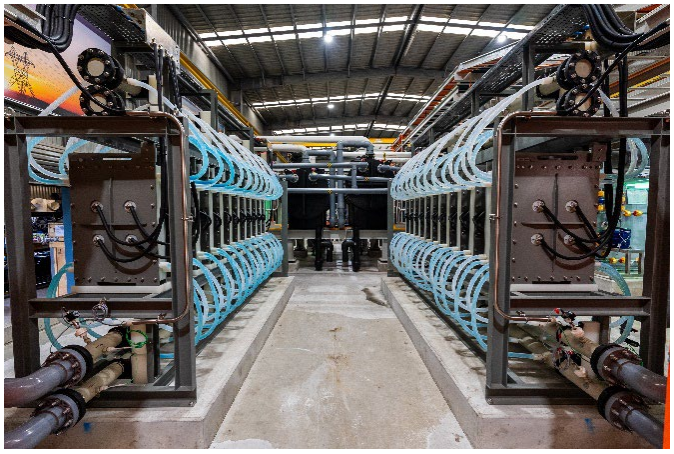
Press Release

Company Name: Idemitsu Kosan Co., Ltd.
Representative Director & Chief Executive Officer: Shunichi Kito
(Company Code: 5019, TSE Prime Market)
Contact person: Daisuke Mogi, General Manager

Majority investment in Vecco, a company promoting a vanadium project in Australia, and full-scale entry into a critical minerals business

Leading the establishment of a supply chain for vanadium flow batteries to enhance the convenience of renewable energy

Through Idemitsu Debella Pty Ltd (Affiliated company of Idemitsu Australia which is a 100%-owned subsidiary of Idemitsu Kosan), Idemitsu Kosan Co.,Ltd. (Head Office: Chiyoda-ku, Tokyo; Representative Director, President and Chief Executive Officer: Shunichi Kito, hereinafter referred to as “Idemitsu”), signed an agreement on December 18 to increase its shareholding in Vecco (Vecco Group Pty Ltd.: Head Office: Brisbane), a company promoting vanadium mine development, vanadium electrolyte manufacturing, etc. in Australia, to 51%. Idemitsu will lead the establishment of an integrated supply chain for vanadium, from mine development to electrolyte production, and make a full-scale entry into the critical minerals business starting from Australia.



Vanadium electrolyte manufacturing (Vecco manufacturing facility)

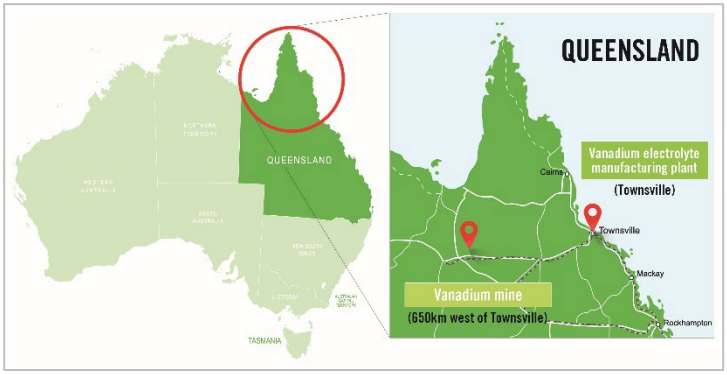
With the aim of entering the critical minerals business, including the minerals necessary for promoting the introduction of renewable energy, and acquiring knowledge, Idemitsu has been investing in Vecco since 2022. The decision to make a majority investment in the company is based on the expectation of long-term growth of this business and future earnings expansion. This brings Idemitsu's total investment in the company to AUD$75 million.

The latest IEA World Energy Outlook 2024 states that global electricity demand will increase six times faster by 2035 than the growth rate of the past decade, in line with each country’s decarbonization target. It is predicted that renewable energy sources will be responsible for about half of the power generation, and it is reported that investment in power grids and power storage systems is essential to achieve both decarbonization and a stable power system. In addition, in order to achieve the 1.5°C target set at COP28, it is necessary to triple power generation capacity from renewable energy sources by 2030, and 1500 GW of electricity storage capacity must be secured. In Japan, discussions on the formulation of the next Strategic Energy Plan, which will be formulated within this fiscal year, have focused on the need for renewable energy to become the main source of power and on the need for energy storage systems to cope with output fluctuations caused by weather and other factors.

Among the energy storage systems whose introduction will need to be promoted in the future, vanadium flow batteries (hereinafter referred to as "VFBs"), which use vanadium as the base material, are storage batteries that store energy in a vanadium electrolyte and have characteristics suitable for power system storage batteries, such as easy expansion of battery capacity (larger size), long life with less deterioration, and no risk of ignition, and so they are expected to enhance convenience when combined with renewable energy sources such as solar power, the output of which is easily affected by weather conditions.

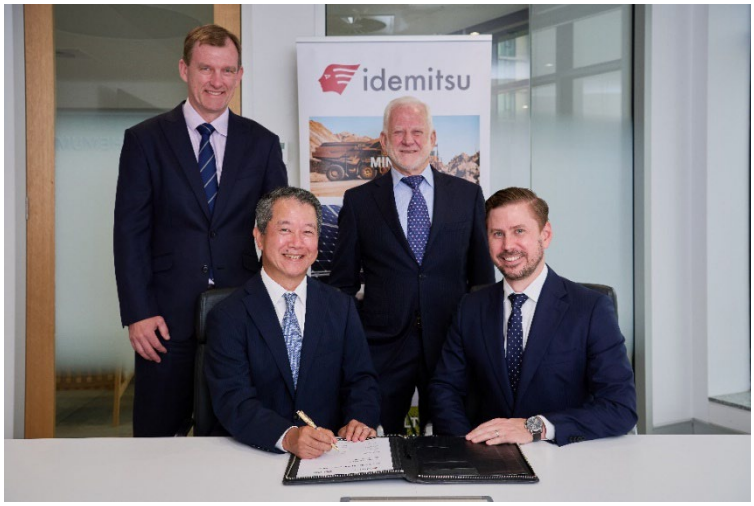
Vecco is working on a project related to a vanadium mine and an electrolyte plant for VFBs (Project name: Debella Project, hereinafter referred to as the "Project") in Queensland, Australia. The Project aims to establish a competitive supply chain of local production and local consumption for mining vanadium-containing ore, refining vanadium pentoxide, and producing vanadium electrolyte for VFBs. As part of this, the company began operating Australia's first commercial-scale vanadium electrolyte manufacturing facility (production capacity: approximately 35 MWh/year) in June 2023. The company will begin a detailed feasibility study (FS) for the development of a vanadium mine in Australia in the first half of 2025 with the aim of refining vanadium pentoxide from its own mine, construction of mining facilities in 2026, and operation commencement in 2027. In the future, it is planned to expand the business overseas by transporting vanadium pentoxide refined in Australia to electrolyte plants not only in Australia but also in the United States and other countries for electrolyte production.

Australia is rich in mineral resources, with many critical minerals such as vanadium and lithium. Idemitsu has been involved in coal mining operations in Australia for about 45 years. We will work with Vecco to steadily advance the Project while leveraging our business foundation, including the human resources we have cultivated, our expertise in development, production, transportation, storage, and shipping, and our relationships with the Australian government, local stakeholders, and customers. Through the Project, Idemitsu aims to make a full-scale entry into the critical minerals business starting from Australia, and to expand the business to include the United States and other countries, as well as to contribute to promoting the introduction of renewable energy.



Project Location Map


Planned Mining Site (Julia Creek)



Ceremony for the signing of the agreement in Australia (Idemitsu and Vecco)

■Reference
Idemitsu invests in Vecco, which promotes a vanadium project in Australia (October 26, 2022)
https://www.idemitsu.com/en/news/2022/221026_1.html
Idemitsu increases investment in Vecco, promoting a vanadium project in Australia (March 24, 2023)
https://www.idemitsu.com/en/news/2022/230324_1.html

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