



News Release

March 8, 2023
Electric Power Development Co., Ltd.
Sumitomo Corporation

Joint Feasibility Study on Clean Hydrogen Production extracted from gasified Latrobe Valley coal in Victoria, Australia

Electric Power Development Co., Ltd. (J-POWER, headquartered in Chuo-ku, Tokyo; President: Toshifumi Watanabe) and Sumitomo Corporation (headquartered in Chiyoda-ku, Tokyo; Representative Director, President and Chief Executive Officer: Masayuki Hyodo) have signed a memorandum of understanding to jointly study the feasibility of a clean hydrogen¹ production project extracted from gasified Latrobe Valley Coal and CO₂ capture & storage (CCS), in Victoria, Australia (the "Project").

The Project will study the commercialization of clean hydrogen production, together with CO₂ capture technology and selection of a preferred CO₂ storage solution, taking advantage of the experience of the J-Power's Osaki Cool Gen Project, which employed its EAGLE² coal gasification technology, being underway in collaboration with Japan's Chugoku EPCo and with the support of METI (Ministry of Economy, Trade, and Industry) and NEDO³. The Project is also aiming to demonstrate an international hydrogen supply chain⁴, utilizing the experience of the HESC, which was completed in 2022 in cooperation with various private sector companies and related ministries and agencies in Australia and Japan.

In addition to utilizing the clean hydrogen inside Australia, the Project will also consider collaboration with the Demonstration Project for the Commercialization of a Liquefied Hydrogen Supply Chain⁵, which was selected as a Green Innovation Fund Project by the NEDO, with the aim of establishing the world's first commercial scale hydrogen supply chain.

On 3rd March, with the presence of Mr. Yasutoshi Nishimura, Minister of Economy, Trade and Industry, Mr. Hiroaki Ishizuka, Chairman of NEDO, Ms. Jenny McAllister, Australian Assistant Minister for Climate Change and Energy, Mr. Justin Hayhurst, Australian Ambassador to Japan, and Mr. Tim Pallas, Treasurer of the Victorian State Government, a memorandum of understanding was signed by major Japanese companies to aim for the aforementioned collaboration for a hydrogen supply chain between Australia and Japan.



Asia Zero Emission Community
Public-Private Investment Forum

J-POWER announced J-POWER “BLUE MISSION 2050” in February 2021, and this Project is one of the specific initiatives to decarbonization. J-POWER will continue to work to achieve a carbon neutral and hydrogen-based society by 2050.

Sumitomo Corporation has identified "mitigation of climate change" as one of the key social issues and has set "the challenge to become carbon neutral by 2050 and achieve a sustainable energy cycle" and aims to create next-generation businesses that contribute to decarbonization. Considering hydrogen as one of the important energies for the future of a decarbonized society, Sumitomo Corporation will multilaterally work on the development of hydrogen-related businesses, such as a “locally produced for locally consumed” type hydrogen business that makes the most of the characteristics of hydrogen and the relevant region; large-scale hydrogen value chain business to promote mass production, transport/storage, and use of hydrogen; and investment in new technologies.

Notes:

1. Clean Hydrogen
Countries and organizations have now moved to a more specific and practical description called Carbon Intensity (kilograms of eCO₂ per kilogram of Hydrogen) and set their own criteria . From a “Well to Gate” basis, Japan is proposing a clean hydrogen CO₂ intensity of 3.4 and in the U.S. they are proposing about 4.
Utilizing the CO₂ capture & storage (CCS) technology, the Project enables the production of low Carbon Intensity Hydrogen.
2. EAGLE
An acronym that stands for Energy Application for Gas, Liquid, and Electricity, is a project funded by the Electric Power Development Company of Japan, in collaboration with Japan’s New Energy and Industrial Technology Development Organization (NEDO).
3. NEDO
The New Energy and Industrial Technology Development Organization, is Japan's largest public management organization promoting research and development as well as deployment of industrial, energy and environmental technologies.

4. **Demonstration Project to Establish an International Hydrogen Supply Chain**
Demonstration of supply chain construction from hydrogen production extracted from gasified Latrobe Valley Coal, an unused resource found in the Latrobe Valley in Victoria, Australia, to transportation to Japan
5. **Demonstration Project for the Commercialization of a Liquefied Hydrogen Supply Chain**
A demonstration project adopted as a Green Innovation Fund Project/Project for the Establishment of Large-Scale Hydrogen Supply Chain (publicly solicited project) by the NEDO. The project will demonstrate an integrated international liquefied hydrogen supply chain that encompasses large-scale hydrogen procurement, liquefaction, loading, sea transportation and unloading. The contractors are Japan Hydrogen Energy Corporation, Iwatani Corporation and ENEOS Corporation.

