

December 18, 2023
ENEOS Corporation

Conclusion of Joint Development Agreement with SEDC Energy and Sumitomo Corporation on Hydrogen Project



(Ceremony at the ASEAN-Japan Economic Co-Creation Forum*1)

ENEOS Corporation announces that it has been studying the establishment of a CO₂-free hydrogen supply chain using renewable energy*² with SEDC Energy Sdn Bhd (“SEDC Energy”) and Sumitomo Corporation (“Sumitomo”), and in October this year entered into a Joint Development Agreement (“the Agreement”).

This initiative was adopted at the ASEAN-Japan Economic Co-Creation Forum held on December 16 at the AZEC Leaders Meeting.

The jointly developed CO₂-free hydrogen supply chain is a project to produce approximately 90,000 tonnes*³ of CO₂-free hydrogen per year by 2030 in Sarawak, Malaysia using renewable energy from hydropower, convert it into MCH*⁴ (methylcyclohexane), which is an efficient form of hydrogen transport, and transport it by sea to markets in Japan.

With the Sarawak Hydrogen Hub initiative, Sarawak has abundant hydropower resources, and hydropower stations there currently operate at a total capacity of approximately 3.5 GW, giving it an advantage in hydrogen production using electricity derived from renewable energy sources. Hydropower generation has little fluctuation in output, making it possible to produce CO₂-free hydrogen at a stable and high operating rate.

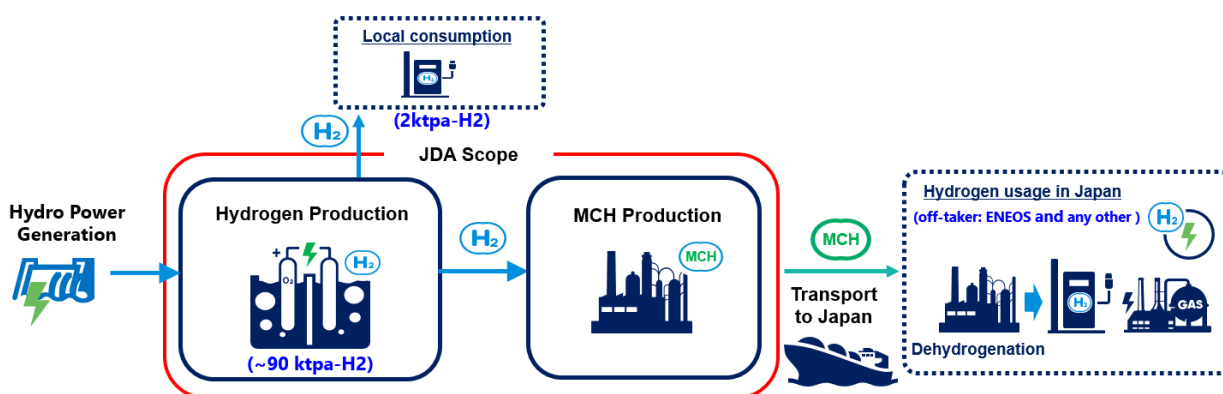
The three companies will further conduct supply chain engineering and business feasibility for investment decisions.

Under the Agreement, ENEOS will lead the engineering of MCH production to meet the size of demand in Japan. In addition to this collaboration, ENEOS will also continue to develop projects^{*5} to receive and dehydrogenerate MCH in Japan and supply CO₂-free hydrogen to industries nearby ENEOS refineries. Sumitomo will support power procurement, and lead to evaluate the business feasibility of the entire joint development scope and to develop finance, and SEDC Energy will lead the study on electricity procurement and hydrogen production.

In the ENEOS Group's Long-Term Vision, ENEOS states that it will take on the challenge of achieving both a stable supply of energy and materials and the realization of a carbon-neutral society

Anticipating mass use of hydrogen in a decarbonized and recycling-based society, ENEOS will work to build a CO₂-free hydrogen supply chain.

Scope of the Agreement



	Power Procurement	Hydrogen Production	MCH Production
SEDC Energy	Lead	Technical lead	
Sumitomo	Support	Project Assessment & Finance Development	
ENEOS		Technical Support	Technical lead

Overview of SEDC Energy

Name	SEDC Energy Sdn Bhd
Representatives	<ul style="list-style-type: none"> • Robert Hardin, CEO • Haji Abdul Hadi Bin Haji Abdul Kadir, Director
Location	Kuching, Sarawak, Malaysia Kuching: capital of Sarawak
Business	A wholly owned subsidiary of Sarawak Economic Development Corporation (SEDC). Manages and develops new energy-related businesses.

*1 Japan-ASEAN Economic Co-Creation Forum Joint Development Agreement Signing Ceremony The Japan-ASEAN Economic Co-Creation Forum was held to highlight decarbonization efforts among the relevant organizations of AZEC countries. Within the Japan-ASEAN Economic Co-Creation Forum, a MOU ceremony was held in the presence of Ken Saito of the Minister of Economy, Trade and Industry, and the Joint Development Agreement was adopted.

*Asian Zero Emission Community

Photos from left to right:

Masayuki Hyodo Sumitomo Corporation, Representative Director, President & CEO
Tomohide Miyata ENEOS Corporation Representative Director, Executive Vice President
Ken Saito Minister of Economy, Trade and Industry
Sarawak Deputy Minister for Energy and Environmental Sustainability
Datuk Dr Hazland Abang Hipni
SEDC Energy Sdn Bhd CEO Robert Hardin

*2 News release dated October 23, 2020.

[Signing of Memorandum of Understanding with SEDC Energy Sdn Bhd and Sumitomo Corporation to Consider Collaboration on Hydrogen Project](#)

*3 Of the 90,000 tons, 2,000 tons were consumed in Sarawak.

*4 A liquid at room temperature and atmospheric pressure with a volume 1/500 that of hydrogen gas. It is characterized by easy handling for storage and transportation.

*5 News release dated August 29, 2023.

[Osaka Gas and ENEOS commence joint study for first large-scale domestic production of e-methane using green hydrogen in the Osaka Bay area](#)

News release dated October 30, 2023

[Launch of Collaborative Study for Utilization of CO2-Free Hydrogen at the Mizushima Industrial Complex](#)