

20th July, 2021
Woodside Energy Ltd.
Japan Oil, Gas and Metals National Corporation
Marubeni Corporation
Hokuriku Electric Power Company
The Kansai Electric Power Co., Inc.

Feasibility Study on Establishing a Clean Fuel Ammonia Supply Chain from Australia to Japan

Woodside Energy Ltd., Japan Oil, Gas and Metals National Corporation, Marubeni Corporation, Hokuriku Electric Power Company and The Kansai Electric Power Co., Inc (hereinafter, the “Parties”) have signed a joint research agreement under which they will conduct a feasibility study into the development of a clean fuel ammonia supply chain from Australia to Japan.

Ammonia does not emit CO₂ during combustion and is considered a promising next-generation zero-emission fuel for energy intensive thermal power plants and marine engines. Given existing proven technologies for the production, storage and transportation of ammonia, it is expected to have early take-up as a zero-emission fuel.

Japan’s Green Growth Strategy established on 26th December 2020 and further refined on 21st June 2021, has also positioned fuel ammonia as one of the key opportunities for Japan to achieve carbon neutrality by 2050.

In relation to Australia, the "Japan-Australia Partnership on Decarbonization through Technology" including fuel ammonia was announced at the Japan-Australia Summit Meeting on 13th June 2021 and the Joint Statement(*) at the Australia-Japan Ministerial Economic Dialogue on 15th July 2021 mentioned that Japan and Australia will work together to promote clean fuel ammonia.

Under the joint agreement, the Parties will conduct a feasibility study of the entire supply chain, including the production of clean fuel ammonia in Australia from natural gas with CO₂ abatement methods such as CCS · CCU (**) and bio-sequestration; marine transportation to Japan; utilization of ammonia as a fuel for power generation and marine use; and financing.

The Parties will work to establish a clean fuel ammonia supply chain between Australia and Japan through collaboration using their respective technologies and knowledge, and will promote efforts to decarbonise both Australia and Japan.

(*) Joint Statement at the Australia-Japan Ministerial Economic Dialogue:
<https://www.meti.go.jp/press/2021/07/20210715008/20210715008-1.pdf>

(**) CCS · CCU

A technology for capturing and storing (CCS: Carbon dioxide Capture and Storage) or effectively utilizing (CCU: Carbon dioxide Capture and Utilization) CO₂ emitted from factories and power plants.

< Conclusion of joint research agreement >



Top row, left to right:
 Woodside Energy Ltd., Shaun Gregory, Executive Vice President, Sustainability and Chief Technology Officer
 Japan Oil, Gas and Metals National Corporation, Toshikazu Ebato, Executive Vice President, Oil & Gas Upstream Technology Unit
 Marubeni Corporation, Akihiko Sagara, Managing Executive Officer, Chief Executive Officer, Energy & Metals Group

Front row, left to right:
 Hokuriku Electric Power Company, Wataru Hirata, Director & Managing Executive Officer
 The Kansai Electric Power Co., Inc, Nozomu Mori, Executive Vice President

< About Each Company >

Woodside Energy Ltd.

- Headquarters : Perth, Australia
- Established : January, 1954
- Representative : Meg O'Neill, Acting Chief Executive Officer
- Website : <https://www.woodside.com.au/>

Japan Oil, Gas and Metals National Corporation

Headquarters : Tokyo, Japan
Established : February, 2004
Representative : Tetsuhiro Hosono, Chairman & CEO
Website : <http://www.jogmec.go.jp/english/index.html>

Marubeni Corporation

Headquarters : Tokyo, Japan
Established : December, 1949
Representative : Masumi Kakinoki, President and CEO
Website : <https://www.marubeni.com/en/>

Hokuriku Electric Power Company

Headquarters : Toyama, Japan
Established : May, 1951
Representative : Koji Matsuda,
Representative Director & President
Website : <http://www.rikuden.co.jp/english/index.html>

The Kansai Electric Power Co., Inc.

Headquarters : Osaka, Japan
Established : May, 1951
Representative : Takashi Morimoto,
Director, Representative Executive Officer, President
Website : <https://www.kepco.co.jp/english/>

< Graphics of the clean fuel ammonia supply chain between Australia and Japan >

