Marubeni Corporation Japan Petroleum Exploration Co., Ltd.

Joint Study Agreement for a Feasibility Assessment on BECCS in South Sumatra, Indonesia

Marubeni Corporation (hereinafter, "Marubeni") and Japan Petroleum Exploration Co., Ltd. (hereinafter, "JAPEX") have entered into a joint study agreement with PT Pertamina (Persero) (hereinafter, "PT Pertamina"), an Indonesian state-owned enterprise engaged in integrated energy, and its subsidiary PT Pertamina Hulu Energi (hereinafter, "PHE") to conduct a feasibility assessment on BECCS*1 at a pulp mill and nearby oil field area in South Sumatra Province, Indonesia (hereinafter, the "Study").



Unveiling of the project with the ministers of both countries at the AZEC Ministerial Meeting

The Study will evaluate the feasibility of implementing BECCS by capturing CO₂ emitted from biomassfueled boilers for self-power generation at the pulp mill operated by PT. Tanjungenim Lestari Pulp and Paper (hereinafter, "TEL"), a Marubeni subsidiary in Indonesia. The captured CO₂ would be injected and stored into synclinal aquifers*² in the northern Limau oil field, operated by the Pertamina group near the TEL factory. Through this Study, the parties aim to commence operations by 2030.

BECCS is one of the key negative emission technologies (technologies that can achieve net negative CO₂ emissions) crucial for realizing carbon neutrality. It is particularly expected to be an effective option for offsetting CO₂ from hard-to-abate industries where complete decarbonization is challenging. Currently, BECCS technology is progressing from the demonstration stage to pilot commercialization, and if a commercial scale BECCS project is realized as a result of this Study, it would present a pioneering initiative in the field.

Marubeni has formulated its long-term vision on climate change in March 2021, and in its Mid-Term

Management Strategy "GC2024," green strategy is positioned as one of the basic policies for enhancing corporate value. CCS business represents a business opportunity to create a positive impact on climate change. Through the creation of new businesses via this Study, Marubeni aims to contribute to sustainable economic development in Indonesia.

JAPEX continues to pursue initiatives aiming to realize carbon-neutral or carbon-negative projects both in Japan and internationally, including this Study. The company aims to grow as a "comprehensive energy company" adapted to the times and further enhance its corporate value.

*¹ BECCS (Bioenergy with Carbon Capture and Storage) is a technology that combines biomass power generation with CCS. Biomass power generation achieves net-zero CO₂ emissions as the amount of CO₂ captured by biomass equals the emissions during power generation. By combining this with CCS, which further reduces CO₂, the total amount of CO₂ captured and reduced can exceed the emissions, resulting in negative emissions.

Company Overviews

Company Marubeni Corporation

Name:

Head Office: Chiyoda-ku, Tokyo

Establishment: 1949

Representative: Masumi Kakinoki

Main Business: Through its domestic and international network, the company is engaged in a

wide range of business activities, including import, export (including foreign transactions) and domestic transactions, as well as various service operations,

domestic and foreign business investment, and resource development.

Website: https://www.marubeni.com/en/

Company Japan Petroleum Exploration Co., Ltd.

Name:

Head Office: Chiyoda-ku, Tokyo

Establishment: 1970

Representative: Michiro Yamashita

Main Business: Exploration, development, production, and sale of oil, natural gas, and other

energy resources, contact service-related operations such as drilling;

development of solar, wind, geothermal, biomass, and other renewable energy

resources; and supply of electric power

Website: https://www.japex.co.jp/en/

Company PT Pertamina (Persero)

Name:

Head Office: Jakarta, Republic of Indonesia

Establishment: 1957

Representative: Nicke Widyawati

Main Business: Exploration, development, and production of oil and natural gas (upstream

sector); oil refining and petrochemical products manufacturing (refining sector); marketing and distribution of petroleum and gas products (downstream sector); development of renewable energy, power generation business, and services for

shipping and logistics

Website: https://www.pertamina.com/

Company PT Pertamina Hulu Energi

Name:

Head Office: Jakarta, Republic of Indonesia

Establishment: 1989

Representative: Chalid Said Salim

^{*2} An underground sand layer filled with groundwater.

Main Business:

Exploration, development, and production of oil and natural gas (upstream sector); operation and management of oil and gas fields both domestically and internationally; acquisition and development of new blocks; technological innovation and environmentally conscious sustainable resource development through partnerships