

OGA to collaborate with Santos in e-methane production in Australia, for export to Japan and other markets

March 7, 2023
Osaka Gas Co., Ltd.

Osaka Gas Co., Ltd. (Osaka Gas) today announced its wholly owned subsidiary, Osaka Gas Australia Pty Ltd (OGA), has entered into an agreement with Santos Ltd (Santos), to conduct Pre-Front End Engineering and Design (Pre-FEED) work on a project to produce carbon neutral synthetic methane, also known as e-methane. Santos is an Australian energy company with global operations across Australia, Papua New Guinea, Timor-Leste, and North America.

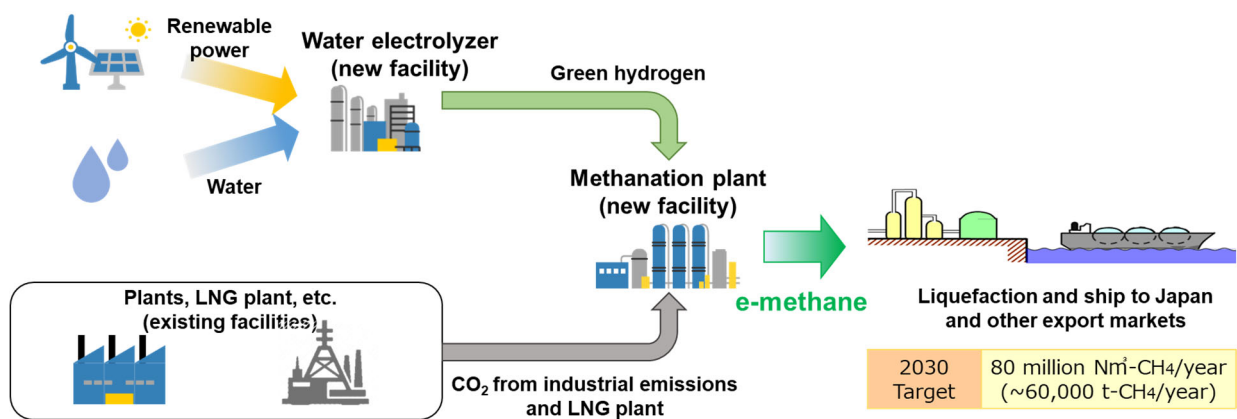
This project aims to produce e-methane from green hydrogen, which is generated through water electrolysis powered by renewable energy, and CO₂ captured at industrial areas and natural gas production sites. The produced e-methane is proposed to be liquefied at nearby Santos or third party facilities for export to Japan and other markets. The possibility of utilizing CO₂ recovered through direct air capture, will be considered in the later phases of the project.

Following a successful joint feasibility study conducted in 2022, OGA and Santos plan to undertake Pre-FEED from April 2023, which includes the procurement of renewable power and CO₂, site selection for e-methane and green hydrogen plants, optimization of e-methane production efficiency and processes, and further detailed assessment of feasibility. The project partners aim for FEED entry in 2024 and Final Investment Decision in 20261Q to produce e-methane at a plant with a planned capacity of 10,000 Nm³/h and export approximately 60,000 tons (80 million Nm³/year) of e-methane annually starting in 2030.

This project is part of Osaka Gas's initiatives to achieve net zero by 2050, focusing on e-methane, which can be transported and used in the existing gas infrastructure and appliances without replacement or modification, saving social costs. Osaka Gas is conducting e-methane studies in multiple locations, including Australia, North America, South America, Middle East and Southeast Asia, and developing technologies for e-methane to meet the heat demand in a carbon neutral way, potentially utilize it as a fuel for power generation and mobility, and contribute to Japan's smooth transition to net zero.

1. Project Overview

- Production of e-methane from green hydrogen, which is generated through water electrolysis powered by renewable energy, and CO₂ captured at industrial areas and natural gas production sites. (The possibility of utilizing CO₂ recovered through direct air capture, will be considered in the later phase of the project.)
- Liquefaction of e-methane at nearby Santos or third party LNG facilities to export to Japan and other markets.



<Santos's LNG plant>



(Source: Santos Ltd)

2. Santos Company Profile

| | |
|----------------|--|
| Company Name | Santos Ltd |
| Headquarters | Adelaide, South Australia, Australia |
| Established | March 1954 |
| Representative | Kevin Gallagher, Managing Director & Chief Executive Officer |
| Main Business | Oil and gas upstream E&P and investment, etc. |