

## **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 Australia Pty Ltd (OGA), a 100% subsidiary of Osaka Gas Co., Ltd., 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.

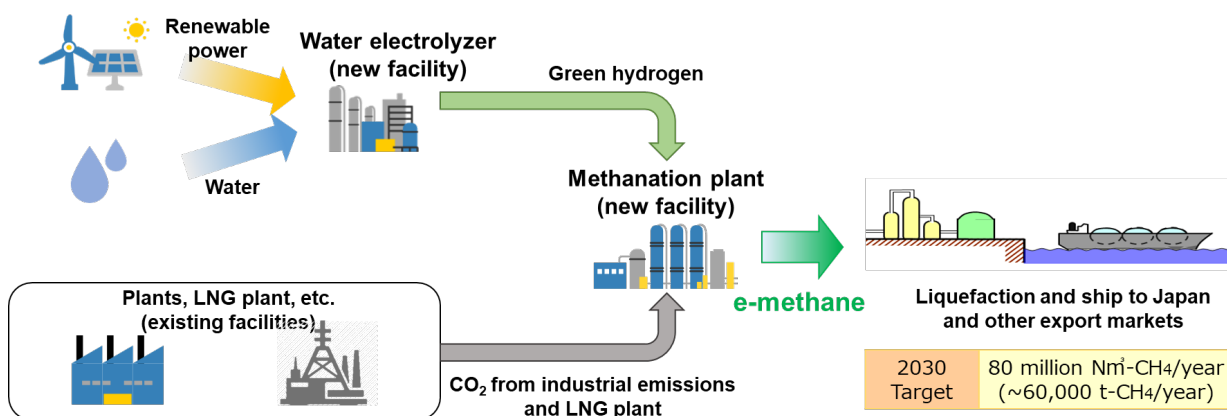
This project aims to produce e-methane from green hydrogen, which is generated through water electrolysis powered by renewable energy, and CO<sub>2</sub> captured at industrial areas and natural gas production sites. The produced e-methane is proposed to be liquefied at nearby Santos or third party facilities for export to Japan and other markets. The possibility of utilizing CO<sub>2</sub> 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 CO<sub>2</sub>, 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 2026 1Q to produce e-methane at a plant with a planned capacity of 10,000 Nm<sup>3</sup>/h and export approximately 60,000 tons (80 million Nm<sup>3</sup>/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 CO<sub>2</sub> captured at industrial areas and natural gas production sites. (The possibility of utilizing CO<sub>2</sub> 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.                |