



Carbon Neutral Research Hub, Osaka Gas Co., Ltd. 6-19-9 Torishima, Konohana-ku, Osaka 554-0051 (Reception: Energy Technology Laboratories)



# SOSAKA GAS Daigas Group



FACILITY INFORMATION



We strive to become carbon neutral by 2050 through decarbonization of our gas and electricity by introducing methanation\* to generate gas with renewable energy and hydrogen and by increasing the share of renewables in our power generation portfolio. And as an innovative energy and services company, we plan to provide solutions for the realization of a sustainable society.

While technologies are being developed to realize a carbon neutral society, we also strive to contribute to radical reduction of CO<sub>2</sub> emissions by promoting advanced utilization of natural gas and wider usage of renewable energy, aiming for a CO2 emissions reduction contribution target of more than 8.5 million tons/year\*\*, which was previously set for 2030.

Striving to become carbon neutral in our group business through innovation 2050 Carbon neutral



Contributing to the reduction of CO<sub>2</sub> emissions throughout society FY2030

SOEC methanation

**5 GW** of renewables development contribution on a global basis

Nearly **50%** of our power portfolio in Japan consisting of renewables\*\*\*

10 million tons/year\*\*\* of CO2 emissions reduction contribution

**Methanation** 

Sabatier methanation

Smart Energy Home

- \*\* Our CO2 emissions reduction contribution annual target for 2030 set out in our long-term management vision announced in 2017 (2030 cumulative target: 70 million tons)
- \*\*\* Including solar, wind, and biomass power projects, which are eligible for the feed-in tariff (FIT) scheme



Biomethanation

#### **Biomass**







Chemical looping combustion





**Environmental** experiment building

**ECO Center** 



### CARBON NEUTRAL RESEARCH HUB **ANNEX**

# Hydrogen and ammonia



SOEC cell





Methanation catalyst

Combustion technologies for hydrogen and ammonia



Laboratory **Building 3** 

El Lab Laboratory **Building 1** 

Laboratory **Building 2** 

Hydrogen test site

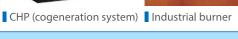
**Construction site** of a new R&D base





**\*VPP**: Virtual Power Plant





## **Energy-saving equipment**



Gas air conditioning

**VPP**\*

