Commencement of the Joint Feasibility Study with Santos for Production and Export of e-methane in Australia

Tokyo Gas Co., Ltd.

Tokyo, November 21, 2023 –Tokyo Gas Co., Ltd. (Tokyo Gas) and Santos Ltd (Santos) have entered into an agreement through Santos Ventures Pty Ltd, a subsidiary of Santos, to conduct a joint feasibility study on a project to produce e-methane* 1 in the Cooper Basin in central eastern Australia, where Santos has knowledge from decades of development and operation of upstream gas fields, and to export e-methane to Japan. The project aims to export 60,000 tons of e-methane per year (equivalent to approx. 80 million m3 of city gas per year) to Japan from 2030, with a view to future larger scale exports.

Both companies will jointly work to develop an international supply chain for e-methane, in addition to advocating for the design of a CO2 emissions counting system for e-methane. Tokyo Gas has a long-term relationship with Santos on the Darwin LNG project in Australia both as an LNG off-taker and as a joint venture partner, and will cooperate on this project and also its future expansion.

In order to achieve the Japanese government's goal of carbon neutrality in 2050, in addition to further introduction of renewable energy, it is crucial to introduce carbon-neutral gas that can meet heat demand which currently accounts for 60% of the demand in Japan. E-methane is one of the promising measures for a smooth transition to a carbon-neutral society without enormous social costs, as it can be transported via the existing gas infrastructure such as LNG import facilities and city gas pipelines, and consumed by the existing gas equipment and appliances. Tokyo Gas has been promoting e-methane demonstration projects in Japan and strive to establish a large-scale global e-methane supply chain that includes North America, Southeast Asia, the Middle East and Australia. As stated in the Working Group's Interim Report on the Carbon Neutralisation of City Gas*2, we will collaborate with both public and private sectors to take a lead in the international rule-making process aiming to establish rules that will contribute to Japan's carbon neutrality.

Tokyo Gas is collaborating with various entities in Japan and overseas to achieve net-zero CO2 emissions, a goal set forth in the Group Management Vision "Compass 2030", by combining renewable energy, hydrogen, methanation*3, CCUS, and other measures. In particular, we have set a target of introducing e-methane equivalent to 1%*4 of our gas sales volume as of 2030 to make e-methane a reality. Tokyo Gas will continue to strive for the early establishment of the e-methane supply chain and contribute to the Japanese government's goal of carbon neutrality in 2050.

Kentaro Kimoto, Representative Executive Officer and Executive Vice President, Tokyo Gas Commented:

We are very pleased to commence the feasibility study with Santos. We have had a long-standing cooperative relationship with Santos through LNG procurement and other activities. Santos has been actively studying the establishment of an e-methane supply chain from Australia, and we feel very reassured to have them as a partner in the future expansion of e-methane. In the future, we will also utilise the framework of this study and implement initiatives for the decarbonisation of gaseous energy in cooperation with the relevant ministries and agencies.

Kevin Gallagher, Managing Director & Chief Executive Officer, Santos Commented:

Santos values its long-standing relationship with Tokyo Gas, including as a joint venture partner and customer in the Bayu-Undan and Darwin LNG projects. E-methane has the potential to be an important carbon-neutral fuel – a direct substitute for natural gas – that avoids the cost associated with new infrastructure and new industrial processes, which for many sectors are not yet technically feasible, affordable or available. We are excited about this new business opportunity which could transform our Cooper Basin assets into a large-scale, commercial carbon capture and storage, and low carbon fuels hub. Santos is committed to delivering affordable, reliable, lower-carbon energy for our customers in Australia and Asia.

- *1: E-methane is synthetic methane (CH4) produced from non-fossil energy sources such as green hydrogen.
- *2: Ministry of Economy, Trade and Industry, Subcommittee on Electricity and Gas Basic Policy, Gas Utility System Study Working Group "Interim Report on Carbon Neutralization of City Gas" (published 29 June 2023).
- *3: Methanation is a technology to produce methane (CH4), the main component of city gas, through the reaction of carbon dioxide (CO2) and hydrogen (H2).
- *4: 1% of Tokyo Gas's city gas sales excluding wholesaling and power generation (as of FY 2020, approximately 80 million cubic meters.