Santos

Media Release

19 December 2023

Santos to collaborate with Japan's Toho Gas on producing carbon-neutral e-methane in the Cooper Basin

Santos has signed an agreement with Toho Gas, one of the largest gas utility companies in central Japan, to investigate the potential for producing carbon-neutral e-methane in South Australia's Cooper Basin.

The Santos-Toho Gas collaboration supports Santos Energy Solutions low-carbon fuels ambitions and could lead to the export of carbon-neutral e-methane, made by combining green hydrogen with CO2 obtained from carbon capture of industrial emissions or direct air capture in a circular economy.

The advantage of e-methane is that it has the same properties and chemistry as natural gas, and can use existing gas pipelines, LNG facilities (including liquefaction, ships, tanks and receival terminals) and gas distribution networks.

Therefore, e-methane could be a carbon-neutral substitute for natural gas, saving trillions of dollars in energy transition costs as a drop-in fuel to existing industrial processes and technologies, including for power generation, high-temperature heating and chemicals manufacturing. It's also a direct substitute for use in appliances such as gas stoves and barbecues.

E-methane has potential to provide relatively low-cost decarbonisation, including for hard-to-abate sectors where alternative technologies are not yet proven or economically viable.

Santos CEO and Managing Director Kevin Gallagher said the collaboration with Toho Gas will focus on the Cooper Basin which is shaping up as a large-scale decarbonisation and low-carbon fuels hub with potential access to a vast CO2 source from industrial emissions or direct air capture, and which has vast renewable resources for making green hydrogen with electrolysers.

"Japan's 6th Strategic Energy Plan is targeting 1 per cent e-methane in existing gas infrastructure by 2030 and 90 per cent by 2050. This is a huge opportunity for Santos and South Australia. The Cooper Basin, leveraging world class renewables and carbon storage resources, and Santos' existing infrastructure position, is extremely well placed to meet Japan's e-methane demand from 2030," Mr Gallagher said.

"We're very excited to be working with Toho Gas and building the trade, technology and investment partnerships that will put Santos in an excellent position to support Japan's decarbonisation through our LNG, CCS and low-carbon fuels businesses, including the potential for e-methane production.



"If we progress to the next stage, this collaboration could potentially extend the life of the Cooper Basin for another 55 years, keeping it at the centre of a modern Australian energy industry and supporting hundreds of well-paying, skilled and secure jobs for another three generations and beyond," Mr Gallagher said.

This MOU supports and complements current studies with Tokyo Gas and Osaka Gas for the potential development of low-carbon e-methane production around Santos' operations.

The MOU also builds on and complements recent MOUs with APA, ADNOC, JX Nippon and ENEOS as Santos seeks to build out a network of CO2 pipeline and other infrastructure supporting a new carbon capture and storage industry in Australia that could decarbonise not only our domestic economy, but regional economies as well.

Headquartered in Nagoya, Toho Gas' primary businesses are in the supply of gas, heat and electricity to about three million customers in the Chubu region.