



## MATHESON Signs Oxygen Supply Contract for 1 PointFive's DAC Plant "DAC potential for carbon neutrality"

Nippon Sanso Holdings Corporation ("NSHD", President CEO: Toshihiko Hamada) hereby announces that Matheson Tri-Gas, Inc. ("MATHESON", headquartered in Texas, U.S.), NSHD's U.S. operating company entered into a gas supply agreement with 1PointFive to provide oxygen for the carbon capture, utilization and sequestration company's first Direct Air Capture (DAC\*) plant in Texas.

MATHESON will invest in and establish an Air Separation Unit to supply Oxygen to "Stratos", 1PointFive's DAC plant under construction in Ector County, Texas. The Oxygen is used in the DAC process to produce a pure stream of  $CO_2$  which is then securely sequestered in geologic reservoirs. Stratos is expected to commence operations in mid-2025 and capture up to 500,000 tons of  $CO_2$  per year when fully operational, making it the world's largest DAC plant.

The Oxygen solution was developed by MATHESON's onsite business unit in collaboration with our leading technology and engineering partners. The solution targets flexibility and reliable plant operations.

This initiative demonstrates MATHESON's commitment to significant growth through gases supply for highly strategic, commercially sound projects and represents an additional dimension for its onsite footprint. This will strengthen its presence in the growth segment within the Southern United States.

NSHD Group, in its effort to foster a carbon neutral society, is pursuing multiple business and program initiatives to select customers for carefully selected projects. We are committed to continue to explore opportunities to realize growth and a carbon-neutral society by expanding this business on a global scale.

\*Direct Air Capture (DAC):

The technology that 1PointFive will utilize is one developed by Carbon Engineering of Canada, which absorbs CO<sub>2</sub> from the air using potassium hydroxide (KOH) solution.

## DAC Flow Chart Potassium hydroxide is slaked lime Methane and Oxygen recycled Air Calcium Potassium including CO2 CO2 carbonate carbonate (CaCO<sub>3</sub>) $(K_2CO_3)$ Capture and 866 storage Air contractor Pellet reactor Calciner Potassium hydroxide Slaked lime and Thermal decomposition of reacts with CO2 potassium carbonate calcium carbonate with oxygenated methane reacts combustion gas

The Nippon Sanso Holdings Group is the world's fourth-largest supplier of industrial, electronic, and medical gases, operating in four geographic regions – Japan, U.S., Europe and Asia & Oceania – covering over 30 countries and regions. In addition, the Thermos business supplies THERMOS branded products to more than 120 countries worldwide. Since its foundation as Nippon Sanso Ltd. in 1910, the group stands for creating social value through innovative gas solutions that increase industrial productivity, enhance human well-being and contribute to a more sustainable future. With more than 19,000 employees, together, we are "The Gas Professionals" and we all have the same goal: "Making life better through gas technology"

## **NIPPON SANSO HOLDINGS Corporation**

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