

January 19, 2023

Investment in and Collaboration with Global Thermostat, a U.S.-based Firm with Leading-Edge Direct Air Capture Technology

Tokyo Gas Co., Ltd.

Tokyo Gas Co., Ltd. (President: UCHIDA Takashi; “Tokyo Gas”), acting through its wholly owned subsidiary Acario Investment One, LLC (CEO: OKUI Toshiharu), becomes the first Japanese energy company to invest in and conclude an agreement for collaborating with Global Thermostat, PBC (“Global Thermostat”), a U.S.-based firm which offers a leading-edge technology for the Direct Air Capture (“DAC”) of carbon dioxide directly from the atmosphere.

Direct air capture of carbon dioxide from the atmosphere has drawn global attention as a negative emissions*¹ technology and is expected to contribute to realizing “net-zero” in the future. Global Thermostat, with its leading technology, is currently developing deployments for e-fuel*² production and also scaling up its leading technology in a project supported by the U.S. Department of Energy*³.

Global Thermostat’s solid adsorption process*⁴ has been rigorously refined and tested over the last ten years to address the primary technical challenges associated with DAC, namely the ability to efficiently process large volumes of air and provide the energy for regeneration in the most cost-effective manner possible.

Through this investment and collaboration, Tokyo Gas will deploy Global Thermostat’s DAC system to Japan for the first time to carry out CO₂ capture tests and will work on advancing the practical deployment of DAC. In the future, Tokyo Gas will also seek to develop new decarbonized energy businesses by utilizing CO₂ captured by DAC for methanation, CCUS*⁵ and other applications within Japan and abroad.

Paul Nahi, CEO of Global Thermostat, stated:

“Our partnership with Tokyo Gas is an important step toward our goal of delivering cost-effective Direct Air Capture on a worldwide scale. Along with cuts in carbon emissions, we believe Direct Air Capture must play a key role in returning carbon dioxide in the atmosphere to safe and sustainable levels, helping stabilize the climate as soon as possible. We’re excited to partner with Tokyo Gas and help them fulfill their net-zero strategy.”

KIMOTO Kentaro, Tokyo Gas Senior Managing Executive Officer, Chief Executive of Digital Innovation Division, stated:

“We are very pleased to be able to announce our investment and the conclusion of our agreement for collaboration with Global Thermostat. We are certain that Global Thermostat’s DAC technology will be essential to the transition to a decarbonized society. Through this partnership, we will develop solutions for decarbonization in order to achieve the Net-Zero CO₂ goal set forth in our management vision “Compass 2030.””

Overview of Global Thermostat, PBC

| | |
|-----------------------|----------------------------------------------------------------------------|
| Company name | Global Thermostat, PBC |
| Representative | Paul Nahi, CEO |
| Date of Establishment | August 2022. Originally established as a Limited Liability Company in 2010 |
| Headquarters location | Colorado, USA |
| Activities | Development and deployment of direct air capture technology |

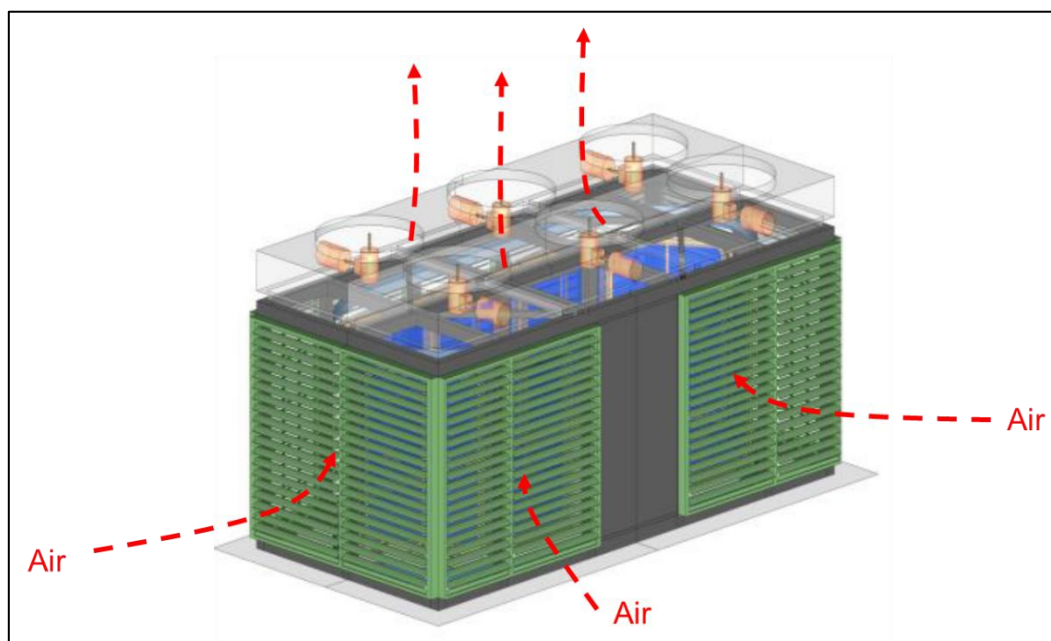
Overview of Acario Investment One, LLC

| | |
|-----------------------|------------------------------------------------------------------|
| Company name | Acario Investment One, LLC |
| Representative | OKUI Toshiharu , CEO |
| Date of Establishment | December 2017 |
| Headquarters location | California, USA |
| Shareholder | Tokyo Gas Co., Ltd. (100%) |
| Activities | Investment in energy-related companies and venture capital funds |

Tokyo Gas Group will continue advancing efforts for early development of decarbonization technologies and also lead the efforts towards achieving Net-Zero CO₂ in its “challenge to achieve Net-Zero CO₂” set forth in Tokyo Gas Group’s Management Vision, “Compass 2030”. We will thus contribute to the Japanese government’s goal of realizing a “carbon-neutral and decarbonized society by 2050”.

- *1 The achievement of net negative CO₂ emissions through means such as removal of CO₂ from the atmosphere.
- *2 Fuel which is produced from CO₂ and the renewable energy-derived hydrogen.
- *3 An initial engineering design of a DAC system aimed at removing 100,000 tons of CO₂ from the atmosphere per year (Award amount: \$2.5 million, announced in June 2021)
- *4 CO₂ removal method using solid adsorption.
- *5 Carbon dioxide Capture, Utilization and Storage

Image of Global Thermostat’s DAC system



(Courtesy of Global Thermostat)