

JAL GROUP NEWS

Sustainability

December 05, 2024

Japan Airlines Partners with Heirloom Carbon Technologies to Advance CO2 Removal

By investing in Heirloom Carbon Technologies, Inc., JAL aims to:

- > Diversify approaches to achieve Net Zero CO2 Emissions by 2050.
- Contribute to the development of CO2 removal technologies that play an important role in global decarbonization.

Tokyo, JAPAN - Japan Airlines Co., Ltd. (JAL) has announced an investment in <u>Heirloom Carbon</u> <u>Technologies, Inc.</u> (headquartered in California, USA; CEO: Shashank Samala; hereinafter "Heirloom"), a company specializing in Direct Air Capture, a negative emission technology that captures CO2 directly from the atmosphere. This strategic investment aims to diversify JAL's approaches to achieving Net Zero CO2 Emissions by 2050.



Tanks to store collected CO2

[Background and Purpose of the Investment]

Following the CVC investment in March 2024 in Captura, a U.S. venture company with Direct Ocean Capture technology (*1), one of the negative emission technologies, JAL will also invest in Heirloom, a company utilizing limestone for CO2 removal. This investment addresses the diversification of future decarbonization approaches, such as the use of carbon credits generated from the removal of carbon dioxide from the atmosphere, and supports the development of CO2 removal technologies crucial for global decarbonization.

(*1) Technology to recover CO2 and carbonate ions dissolved in seawater by electrochemical method.

[About Heirloom]



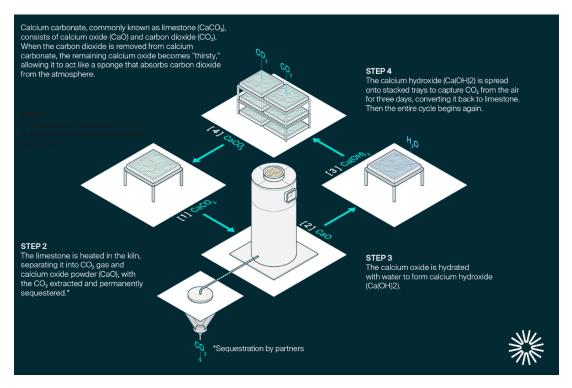
Founded in 2020, Heirloom is a company with an efficient CO2 removal technology using limestone with no supply constraints. The first commercial plant in the U.S. has been in operation from 2023, and a larger plant is scheduled to begin operating in 2026. The company continues to grow as a leader in Direct Air Capture technology by sequentially expanding the number of plants in the future.



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[The Basic Process of Heirloom's Direct Air Capture Technology]

Limestone has been absorbing and fixing atmospheric CO₂ since time immemorial, helping to keep atmospheric CO₂ concentrations low. Heirloom leverages this property by heating limestone with renewable energy to extract CO₂ and then allowing it to absorb CO₂ from the atmosphere like a sponge. This technology enables the artificial collection of large amounts of CO₂ from the atmosphere at a low cost.



Heirloom CO2 removal technology (Source: Heirloom website)

[Statements from Key Executives]

Yasushi Noda, Senior Vice President, General Affairs Division, Japan Airlines Co., Ltd.: "We recognize this partnership as an important milestone in the development of global decarbonization solutions. Through Heirloom's innovative Direct Air Capture technology, we aim to significantly advance our efforts towards Net Zero CO2 Emissions by 2050."

Shashank Samala, CEO of Heirloom Carbon Technologies, Inc:

"We're honored to receive this investment from JAL and look forward to working with them as a strategic partner to rapidly scale our CO2 removal technology to make meaningful progress in the fight against global temperature rise."

(Reference) Heirloom website: <u>https://www.heirloomcarbon.com/</u> (Reference) Heirloom press release: <u>https://www.heirloomcarbon.com/news</u>



