

July 28, 2025
Japan CCS Co., Ltd.

**Regarding the start of construction of a liquefied CO₂
high flow-velocity liquid transport technology verification facility
in the CO₂ Ship Transportation Demonstration Project**

On July 22, 2025, Japan CCS Co., Ltd. (Head Office: Chiyoda-ku, Tokyo; President: Toshiaki Nakajima) started construction of a liquefied CO₂ high flow-velocity liquid transport technology verification facility at the Tomakomai terminal of the “R&D and Demonstration of CO₂ Ship Transportation Project”^{*1} (hereafter “this project”), which has been jointly commissioned to four companies including Japan CCS by NEDO (New Energy and Industrial Technology Development Organization).

This project is conducting the R&D and demonstration of technology required to establish an integrated ship transportation system for the liquefaction, storage, loading/unloading and marine transportation of CO₂ under optimal temperature and pressure conditions as a means for the safe, low-cost and mass transport of CO₂ captured from the flue gas of factories, etc. to sites for implementing CCUS.

Regarding liquefied CO₂ ship transportation, as not only the lowering of temperature/pressure for ship size enlargement but also the design/construction of optimal loading/unloading facilities with a view on improved shipping efficiency is required, it was decided to conduct the verification of flow velocity values that contribute to reducing the number of loading arms to shorten loading/unloading time and reduce construction costs, and the construction of necessary facilities at the Tomakomai terminal has been started.

In Japan, with a view towards the social implementation of CCS in 2030, as six of the nine Advanced CCS Projects selected envision domestic and international transportation of CO₂, the establishment of an integrated transportation system for loading, transporting and receiving liquefied CO₂ in the CO₂ Ship Transportation Demonstration Project is highly anticipated.

In cooperation with the joint consignees and with the understanding and support of the local community, Japan CCS will conduct the safe operation of the Tomakomai and Maizuru onshore facilities (liquefied CO₂ storage and loading/unloading facilities) and confirm the approximate optimal flow velocity values through this verification.

^{*1} NEDO project name: CCUS R&D and Demonstration Related Projects / Large Scale CCUS Demonstration at Tomakomai / Demonstration of CO₂ Transportation / R&D and Demonstration of CO₂ Ship Transportation Project

【Place/period of verification】

Place of verification

CO₂ Transportation Tomakomai Office (Tomakomai terminal)



Address: 27-2 Masago-cho, Tomakomai, Hokkaido (premises of Hokkaido Electric Power Co., Inc. Tomakomai Power Plant)

Verification period

July 2025 ~ March 2027 (planned)

【Inquiries regarding this matter】

Japan CCS Co., Ltd.

International Affairs Dept.

Tel: 03-6268-7387 E-mail: info@japanccs.com

ends