

MEDIA RELEASE

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For Immediate Release

Tomakomai CCS Demonstration Project - Target of 300,000 tonnes of carbon dioxide (CO₂) injection achieved

Tokyo, JAPAN - Japan CCS Co., Ltd. (hereinafter "JCCS"; Head Office: Chiyoda-ku, Tokyo; President: Shoichi Ishii) announced that it had achieved the target of 300,000 tonnes of CO₂ injection at the Tomakomai CCS Demonstration Project on November 22, 2019.

JCCS was selected as the contractor for the public tender " Demonstration of CO₂ Reduction Technologies (FY2012)" held by the Ministry of Economy, Trade and Industry of Japan (METI), and under the national policy aiming towards the practical use of CCS technology by around 2020 commenced a demonstration project in Tomakomai from FY2012 (During FY2018 and FY2019, JCCS has conducted the project under the contract "CCS R&D and Demonstration Related Projects / Large Scale CCS Demonstration Project in Tomakomai" under New Energy and Industrial Technology Development Organization (NEDO).).

During the 4 years from FY2012 to FY2015, the facilities to capture high purity CO₂ from CO₂ containing gas emitted by a hydrogen production unit of a refinery - the CO₂ source, and the facilities to inject CO₂ underground were designed and constructed. Also, the conversion of an existing survey well into an observation well, and the drilling of 2 observation wells and 2 injection wells was completed.

At the same time, in order to verify that CO₂ injection into the reservoir will not affect the surrounding environment, a monitoring system to record formation and earthquake data was established, and baseline data prior to injection was obtained. Also, as the reservoir for CO₂ storage was to be in the sub-seabed, a baseline survey of seawater and marine organisms was conducted in accordance with the Act for the Prevention of Marine Pollution and Maritime Disasters.

From April 2016, targeting annual injection of 100,000 tonnes, CO₂ has been injected into a formation 1,000m sub-seabed in the harbor area of Tomakomai Port, as well as experimental injection into a formation 2,400m under the seabed.

On November 22, 2019, cumulative CO₂ injection reached the target of 300,000 tonnes. Accordingly, injection has been suspended, whereas monitoring operations* will be continued.

***Monitoring operations**

Monitoring will be conducted in order to grasp the behavior (movement, distribution) of the injected CO₂, and micro-seismicity and natural earthquakes will be observed on a 24-hour basis, and marine environmental surveys will be carried out to verify that there is no CO₂ leakage.

Milestones of Tomakomai CCS Demonstration Project

- Startup of injection preparations including design and construction of facilities: April 2012
- Commencement of CO₂ injection: April 6, 2016
- Achievement of 300,000 tonnes of CO₂ injection: November 22, 2019

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About Japan CCS Co., Ltd.: Commissioned by the Japanese government to demonstrate a full-chain CCS system in Tomakomai City, Hokkaido, Japan CCS Co., Ltd. (JCCS) was founded in May 2008 when a group of major companies with expertise in CCS-related fields, including electric power, petroleum, oil & gas exploration and development, and plant engineering, joined forces to answer the Japanese government's call for development of CCS technology as a countermeasure against global warming. JCCS is a unique company in the world to be founded and dedicated explicitly to developing integrated CCS technology. More information:

<https://www.japanccs.com/en/>