NEWS RELEASE

ENEOS Xplora

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ENEOS Xplora Inc.

ENEOS Xplora, Sumitomo Corporation and 44.01 sign MoU for the development of CO_2 mineralisation

- Commencing collaboration on CO_2 mineralisation demonstration in the Middle East -

ENEOS Xplora Inc. (“Xplora”) is pleased to announce that it has signed a memorandum of understanding ("this MoU") on 4th December with Sumitomo Corporation and 44.01, a startup company with which Sumitomo Corporation has a capital and business alliance, regarding cooperation for the development of CO_2 mineralisation[*1].

Amidst accelerating global efforts towards achieving carbon neutrality, CO_2 mineralisation is attracting attention as a new CCS[*2] technology. While conventional CCS typically injects CO_2 into sandstone formations, CO_2 mineralisation involves injecting CO_2 into igneous rock[*3] formations. Establishing this technology is expected to expand the range of suitable geological formations and increase the total volume of CO_2 that can be stored.

This MoU establishes a framework for the three parties to conduct concrete and collaborative discussions towards the demonstration and commercialisation of CO_2 mineralisation both in Japan and overseas. Specifically, Xplora aims to demonstrate the technology in the Middle East by 2030. 44.01 brings expertise in CO_2 mineralisation using peridotite[*4] and in optimal injection conditions and methods for CO_2 mineralisation.

To date, Xplora has advanced joint research on CO_2 mineralisation with Japan Organization for Metals and Energy Security (JOGMEC) and conducted quantitative technical evaluations concerning the rate and extent of CO_2 mineralisation through laboratory experiments and simulations. In 2024, we signed an MoU with the University of Wyoming and the Japan Carbon Frontier Organisation (“JCOAL”), strengthening collaboration with leading international research institutions. Furthermore, we signed a MoU with Kyushu Electric Power Co., Inc. and JCOAL to establish a cooperative framework for domestic CO_2 mineralisation demonstration in November 2025, accelerating our efforts towards the implementation of CO_2 mineralisation.

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Through this initiative, Xplora will drive the advancement of CO_2 mineralisation technology. By integrating this technology with diverse expertise from both Japan and overseas, we will advance projects which contribute to carbon neutrality in Japan and around the world.

*1 CO_2 mineralisation: A technology that reacts CO_2 with rock and water to fix and store it underground as a stable mineral.
*2 CCS: Abbreviation for Carbon Dioxide Capture and Storage. A technology that recovers emitted CO_2 and injects it underground for storage.
*3 Igneous rock: A rock formed by the cooling and solidification of magma, widely occurring throughout Japan.
*4 Peridotite: A type of igneous rock. Widely distributed globally, including in Japan and Middle East.

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