









August 8, 2023

[Press Release]

Japan Petroleum Exploration Co., Ltd.
MITSUBISHI GAS CHEMICAL COMPANY, INC.
Tohoku Electric Power Co., Inc.
Hokuetsu Corporation
Nomura Research Institute, Ltd.

Entrust a Study in East-Niigata Area as the "Business Feasibility Study on Japanese Advanced CCS Project" in FY2023 by JOGMEC

Japan Petroleum Exploration Co., Ltd. (JAPEX), MITSUBISHI GAS CHEMICAL COMPANY, INC. (MGC), Tohoku Electric Power Co., Inc. (TOHOKU-EPCO), Hokuetsu Corporation (HC), and Nomura Research Institute, Ltd. (NRI) (hereinafter the "Consortium" for the five companies together) are entrusted a feasibility study of CCS^(*1) in East-Niigata area (hereinafter the "Study") (*2), which is a public solicitation by Japan Organization for Metal and Energy Security (JOGMEC) regarding the Request for Proposal on the "Business Feasibility Study on Japanese Advanced CCS Project" in the fiscal 2023.

The Study will be conducted by the Consortium aiming at launching a CCS project by 2030, while examining CO₂ separation and capture from existing chemical plant/papermaking plant/power station, CO₂ injection and storage point, and transportation pipeline to connect these venues in the East-Niigata area which is a target region in the "Niigata Carbon Neutrality Site Development and Foundation Establishment Strategy"(*3) unveiled in March 2023 by Niigata Prefecture. The Consortium will proceed with examinations including an estimation of required costs by March 2024, utilizing each expertise obtained through their core businesses and existing research and survey data.

Please refer the appendix for the outline of the Study, each companies' role in the Consortium.

The Consortium will make aggressive challenges towards "Carbon Neutrality in 2050" aiming to realize an advanced CCS project in the East-Niigata area through steady progress of the Study and to create additional advantage such as decarbonized fuel and environmental value.

Notes)

- *1: Carbon Capture and Storage.
- *2: The Study has been selected as a candidate for the "Business Feasibility Study on Japanese Advanced CCS Project," which has modeling potential to expand its scale by Hubs & Clusters type and to reduce costs for spreading and expanding CCS. (See a press release on June 13, 2023, by JOGMEC "First Step to Launch Japanese CCS Project JOGMEC selected 7 projects, starting CO2 storage by FY2030 -")
- *3: "Niigata Carbon Neutrality Site Development and Foundation Establishment Strategy" unveiled by Niigata Prefecture on March 31, 2023. *Japanese-language only

[Appendix] Outline of the Study

1) Outline

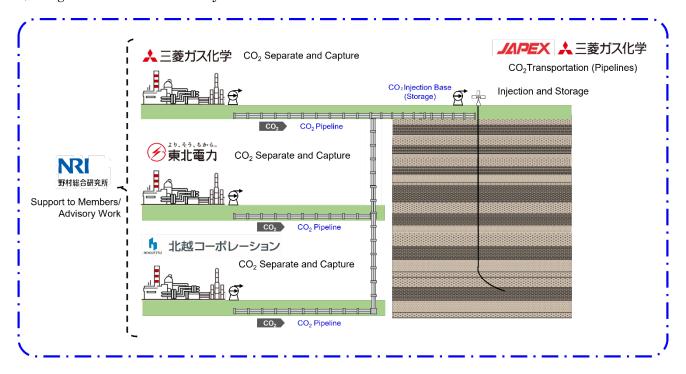
Storage area	East-Niigata area (Existing oil and gas field such as Higashi-Niigata Gas Field* and its vicinity)
Storage amount	Target of approximately 1.5 million tons per year
Emission source	Assuming for existing factories or power station in the area of the Niigata East Port (MGC's Niigata Plant, TOHOKU-EPCO's Higashi-Niigata Power Station, HC's Niigata Mill)
Transportation	Pipelines
Feature of the Study	Promote projects that create added value, such as decarbonized fuels and environmental value for chemical, paper, electric power, by utilizing existing oil and gas fields

Note) Jointly owned by JAPEX and MGC.

2) Each role of the Consortium companies in the Study

JAPEX	CO ₂ injection and storage points in East Niigata area
	CO ₂ transportation pipelines, and facilities for CO ₂ injection and storage
MGC	CO ₂ injection and storage points in East Niigata area
	CO ₂ transportation pipelines, and facilities for CO ₂ injection and storage
	CO ₂ separate and capture facilities in the MGC's owned plant
TOHOKU-EPCO	CO ₂ separate and capture facilities in the TOHOKU-EPCO's owned power station
HC	Biomass fuel-oriented CO ₂ separate and capture facilities in the HC's owned mill
NRI	Support to each member's works, advisory works

3) Image of each role in the Study



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