

# NEWS RELEASE [www.jogmec.go.jp](http://www.jogmec.go.jp)



Japan Organization for Metals and Energy Security

Division in Charge: Advanced CCS Project Team

Tel:+81-3-6758-8546 Fax:+81-3-6758-8056

PR in Charge: Public Relations Division

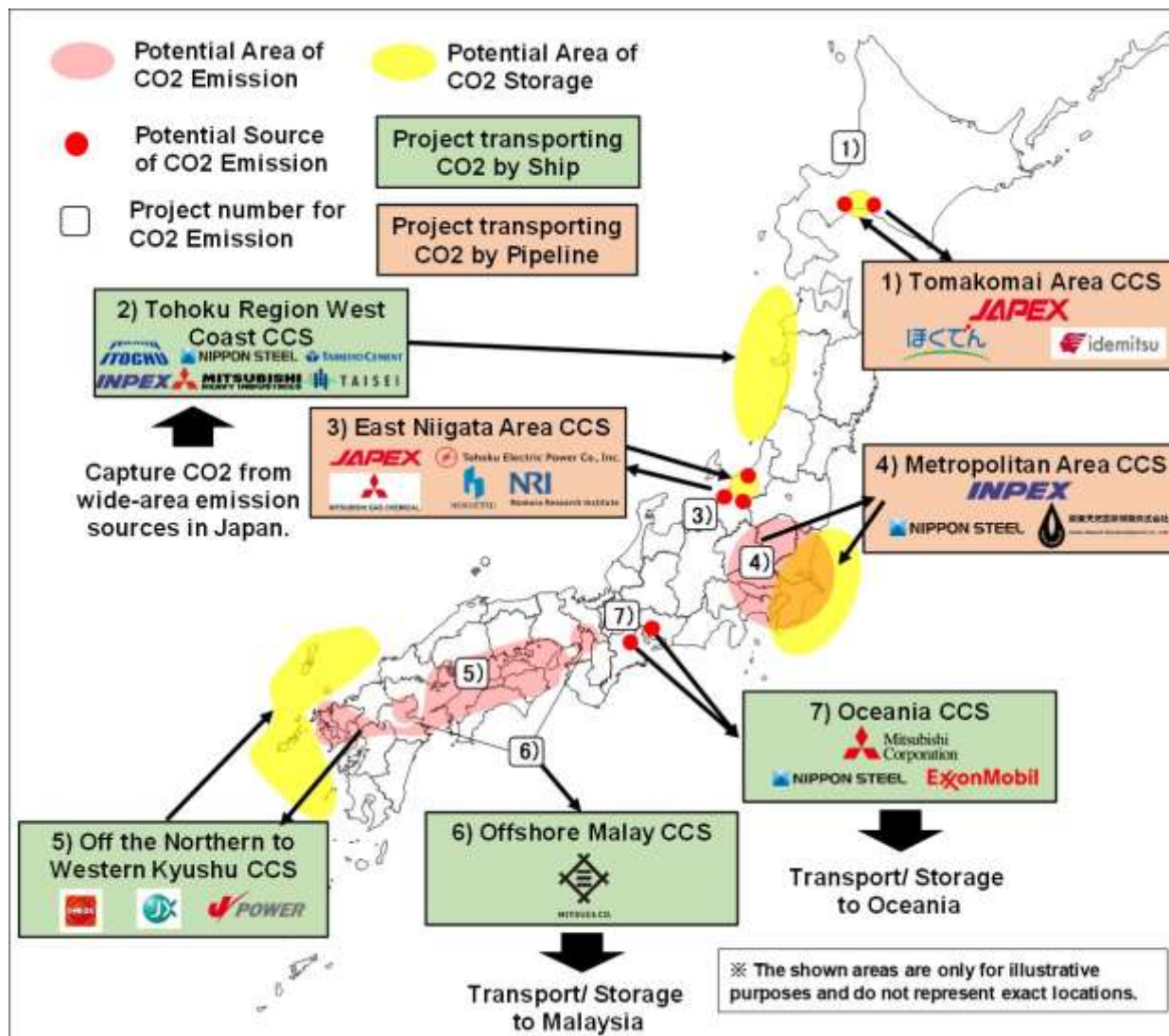
Tel:+81-3-6758-8106 Fax:+81-3-6758-8008

## First Step to Launch Japanese CCS Project

- JOGMEC selected 7 projects, starting CO2 storage by FY2030 -

Japan Organization for Metals and Energy Security (JOGMEC) selected 7 role model projects (5 for domestic storage and 2 for overseas storage) for Japanese Advanced CCS Projects. JOGMEC provides support for the first time in Japan toward the initiation of CCS that is to capture and store CO2 underground, which would greatly advance Japan's efforts to achieve a carbon-neutral society.

7 projects will store approximately 13 Mtpa of CO2 in total.



Location of 7 Japanese Advanced CCS Project and companies proposed each project.

In October 2020, the government of Japan set a goal of achieving zero greenhouse gas emissions to realize carbon neutrality by 2050, and in April 2021, declared that it aims to reduce greenhouse gas emissions by 46% compared to FY2013 by FY2030. In addition, in the “Basic Policy for Realization of GX” (Note 1), the government of Japan shows that it will support advanced projects that would become role models for developing the business environment toward the start of CCS (Note 2) project by 2030.

Furthermore, on the framework of the “Asia CCUS Network” (Note 3), Japan will make use of Japan’s CCUS technologies, systems and knowledge sharing and the improvement of the business environment throughout the Asia region.

In order to promote and extend CCS, JOGMEC focuses on the role model CCS projects which are making continuous efforts for business scale-up and cost reduction by CCS Hubs & Clusters concept (Note 4). JOGMEC named these projects “Japanese Advanced CCS Projects” and provides support to the entire CCS value chain from CO<sub>2</sub> separation, capture to transportation and storage.

As the first initiative for “Japanese Advanced CCS Projects”, JOGMEC selected 7 projects which conduct a feasibility study in FY2023 to start storing CO<sub>2</sub> emitted in Japan by FY2030.

JOGMEC will begin negotiations to conclude contracts for the selected projects. The 7 selected projects target a wide range of industries such as electric power, oil refinery, steel, chemical, cement and pulp/paper. These projects will capture CO<sub>2</sub> emitted from industrial clusters in Hokkaido, Kanto, Chubu, Kinki, Setouchi and Kyushu regions, etc. Also, the projects aim to store approximately 13 Mtpa of CO<sub>2</sub> in total. Out of these projects, 5 projects plan storage in Japan, and the remaining 2 projects storage in Asia and Oceania regions.

During this study, JOGMEC will consider additional supports to enhance the feasibility of the projects according to the progress of the projects.

With this study as a starting point, JOGMEC will support each business phase for the entire value chain of Japanese Advanced CCS Projects and tackle the target of 6 to 12 Mtpa of CO<sub>2</sub> storage by 2030 set by the government of Japan.

In addition, JOGMEC will develop not only domestic CCS projects but also CCS projects with overseas storage, mainly in Asia and Oceania, which might lead to decarbonization throughout the region.

In this way, JOGMEC will seek to achieve approximately 120 to 240 Mtpa of CO<sub>2</sub> storage by 2050, eventually contributing to the stable supply of energy resources and carbon neutrality in Japan.

(Note 1) Press Conference by Minister Nishimura (Excerpt)(Website of the Ministry of Economy, Trade and Industry of Japan)

(URL)[https://www.meti.go.jp/english/speeches/press\\_conferences/2023/0210001.html](https://www.meti.go.jp/english/speeches/press_conferences/2023/0210001.html)

(Note 2) Carbon Dioxide Capture and Storage

(Note 3) "Asia CCUS Network" has launched (Website of the Ministry of Foreign Affairs of Japan)

(URL)[https://www.meti.go.jp/english/press/2021/0622\\_001.html](https://www.meti.go.jp/english/press/2021/0622_001.html)

※ 13 member countries(10 ASEAN countries, Australia, USA and Japan)

(Note 4) An efficient supply chain that captures CO<sub>2</sub> from multiple CO<sub>2</sub> emission sources, gathers at a hub and transport to storage site.

#### ■ Reference

Overview of Request for Proposal on "Business Feasibility Study on Japanese Advanced CCS Project" in FY2023. (March 30, 2023) (Available only in Japanese)

(URL)[https://www.jogmec.go.jp/news/bid/bid\\_10\\_00529.html](https://www.jogmec.go.jp/news/bid/bid_10_00529.html)

■ Overview of Selected Projects (Listed from North to South)

1)Tomakomai Area CCS

Company	Japan Petroleum Exploration Com Ltd.(JAPEX), Idemitsu Kosan Co.,Ltd., Hokkaido Electric Power Co.,Inc.
Area of CO2 Storage	Tomakomai Area (Oil and gas field or Saline aquifer)
CO2 Storage Volume	Approximately 1.5 Mtpa
CO2 Emission Source	Oil refinery, Electric power plant in Tomakomai Area
Transportation	Pipeline
Project Outline	CCUS project pursuing future collaboration with “CCU/ Carbon Recycling” that is to reuse CO2 as resources and “BECCS” that is to combine CCS with a biomass power plant, which would be connected to CO2 pipeline.

2)Tohoku Region West Coast CCS

Company	ITOCHU Corporation, Nippon Steel Corporation, Taiheiyo Cement Corporation, Mitsubishi Heavy Industries, Ltd., ITOCHU Oil Exploration Co.,Ltd., INPEX Corporation, Taisei Corporation
Area of CO2 Storage	Tohoku Region West Coast, etc. (Offshore saline aquifer)
CO2 Storage Volume	Approximately 2 Mtpa
CO2 Emission Source	Wide-area of CO2 emission in Japan Steel plant, Cement plant and Local emitter near CO2 storage
Transportation	Ship and Pipeline
Project Outline	Project with high scalability in a wide area combining various sources of CO2 emission such as steel industry and cement industry by CO2 shipping.

3)East Niigata Area CCS

Company	Japan Petroleum Exploration Com Ltd.(JAPEX), Tohoku Electric Power Co., Inc., Mitsubishi Gas Chemical Company, Inc., Hokuetsu Corporation, Nomura Research Institute, Ltd.
Area of CO2 Storage	Niigata Prefecture (Oil and gas field)
CO2 Storage Volume	Approximately 1.5 Mtpa
CO2 Emission Source	Chemical plant, Pulp mill, Electric power plant in Niigata prefecture
Transportation	Pipeline
Project Outline	Project expecting additional value such as decarbonized fuels and environmental value, utilizing existing oil and gas field to store CO2 from chemical, pulp and electric power plant, etc.

#### 4)Metropolitan Area CCS

Company	INPEX Corporation, Nippon Steel Corporation, Kanto Natural Gas Development Co., Ltd.
Area of CO2 Storage	Metropolitan Area, etc. (Offshore saline aquifer)
CO2 Storage Volume	Approximately 1 Mtpa
CO2 Emission Source	Multiple industries including Steel plant in Metropolitan Area
Transportation	Pipeline
Project Outline	Project with high scalability targeting emission sources of major coastal industrial complex in Metropolitan Area.

#### 5)Off the Northern to Western Kyushu CCS

Company	ENEOS Corporation, JX Nippon Oil & Gas Exploration Corporation, Electric Power Development Co.,Ltd.(J-POWER)
Area of CO2 Storage	Off the Northern to Western in Kyushu (Offshore saline aquifer)
CO2 Storage Volume	Approximately 3 Mtpa
CO2 Emission Source	CO2 emission in Setouchi/ Kyushu region Oil refinery, Electric power plant in West Japan
Transportation	Ship and Pipeline
Project Outline	Project with offshore large-scale CO2 storage targeting the wide area of West Japan, including Setouchi region.

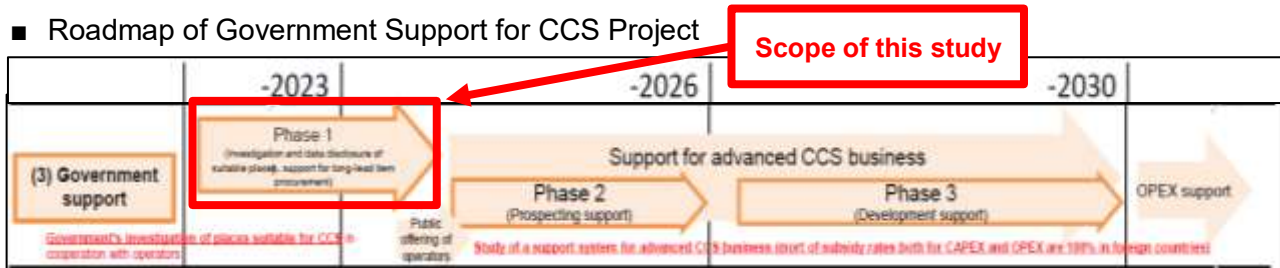
#### 6)Offshore Malay CCS

Company	Mitsui & Co., Ltd.
Area of CO2 Storage	Offshore east coast of Malay peninsula in Malaysia (Offshore depleted Oil and gas field, Saline aquifer)
CO2 Storage Volume	Approximately 2 Mtpa
CO2 Emission Source	Multiple industries including Chemical/ Oil refinery in Kinki/ Kyushu region, etc.
Transportation	Ship and Pipeline
Project Outline	Project promoting cooperation with Malaysia's National Oil Company which keeps the positive discussion on accepting CO2 from Japan.

7)Oceania CCS

Company	Mitsubishi Corporation, Nippon Steel Corporation, ExxonMobil Asia Pacific Pte. Ltd.
Area of CO2 Storage	Oceania (Offshore depleted Oil and gas field, Saline aquifer)
CO2 Storage Volume	Approximately 2 Mtpa
CO2 Emission Source	Multiple industries including Steel plant in Chubu region(Nagoya, Yokkaichi).
Transportation	Ship and Pipeline
Project Outline	Project in offshore Oceania targeting wide industries on the ports of Nagoya and Yokkaichi.

■ Roadmap of Government Support for CCS Project



Source: Japan's CCUS policy (Presentation by the Ministry of Economy, Trade and Industry of Japan at Second Asia CCUS Network Forum)

(URL)[https://acnf.jp/program/file/presentation/6\\_Panelist\\_METI.pdf](https://acnf.jp/program/file/presentation/6_Panelist_METI.pdf)