



Japan CCS Forum 2024

JOGMECにおけるCCS事業化に向けての取り組み

JOGMEC's Initiative toward CCS Business Development

Ryuta KITAMURA
Director General, CCS Project Department

Japan Organization for Metals and Energy Security

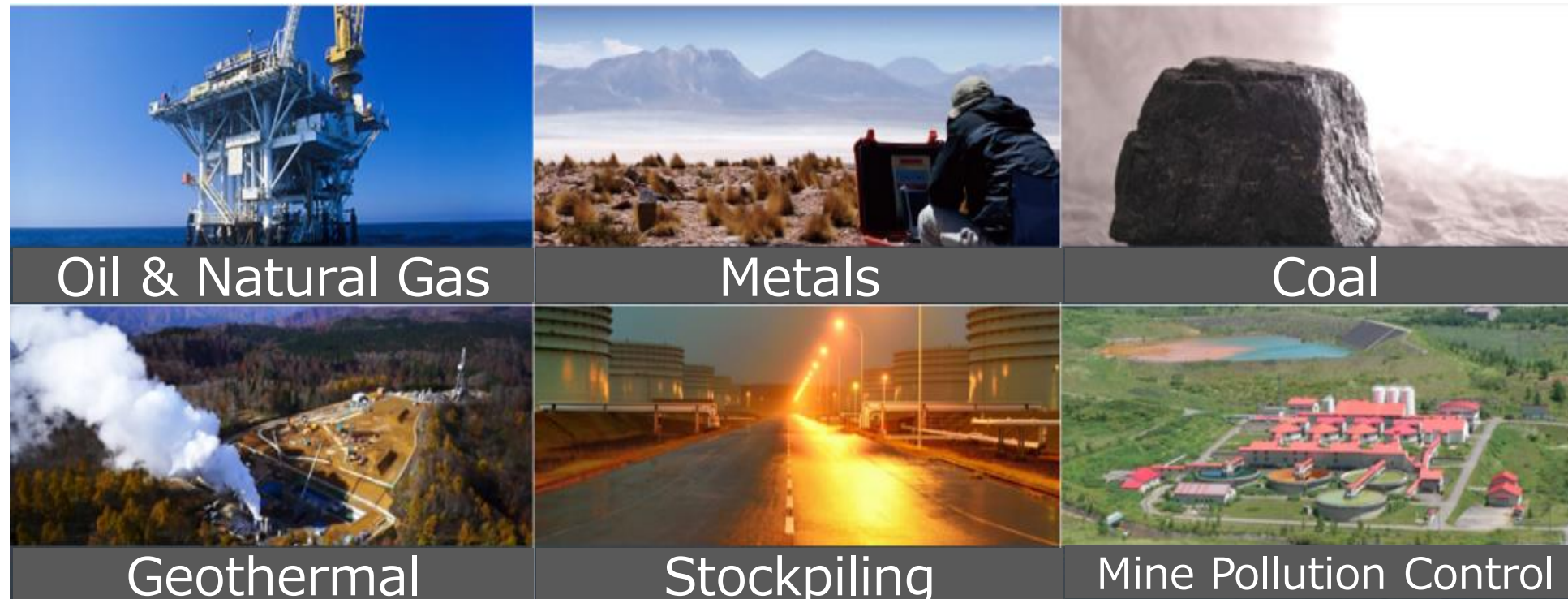
4 December, 2024

JOGMEC's mission and technical expertise



JOGMEC (Japan Organization for Metals and Energy Security)

Mission Securing **stable and affordable supply** of natural resources for Japan



Area of Services

Financial Support

- Equity Finance
- Liability Guarantee
- Grant
- Subsidy, etc.

Technology Support

- Geological Survey
- Technology Development
- Marine Resources Development
- Environmental Safety, etc.

Intelligence Support

- Resource Diplomacy
- International Cooperation
- Information Analysis, etc.

JOGMEC's approach for realizing CCS value chain



【JOGMEC's activities】

JOGMEC, as the executing agency of Japan's energy policy led by METI

- Solving issues related to the **energy trilemma** by providing
 - ✓ Financial support services
 - ✓ Technical support services
 - ✓ Intelligence support services
- Providing services not only to Japanese companies but also to overseas partner organizations

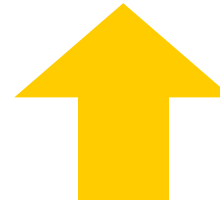
【S+3E (Safety Plus 3 Es) policy】

- ◆ **Energy Security**
Stable supply and secure of resources
- ◆ **Economic Efficiency**
By supporting partners
- ◆ **Environment**
Promoting environmentally friendly resource development

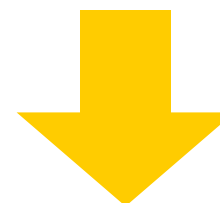
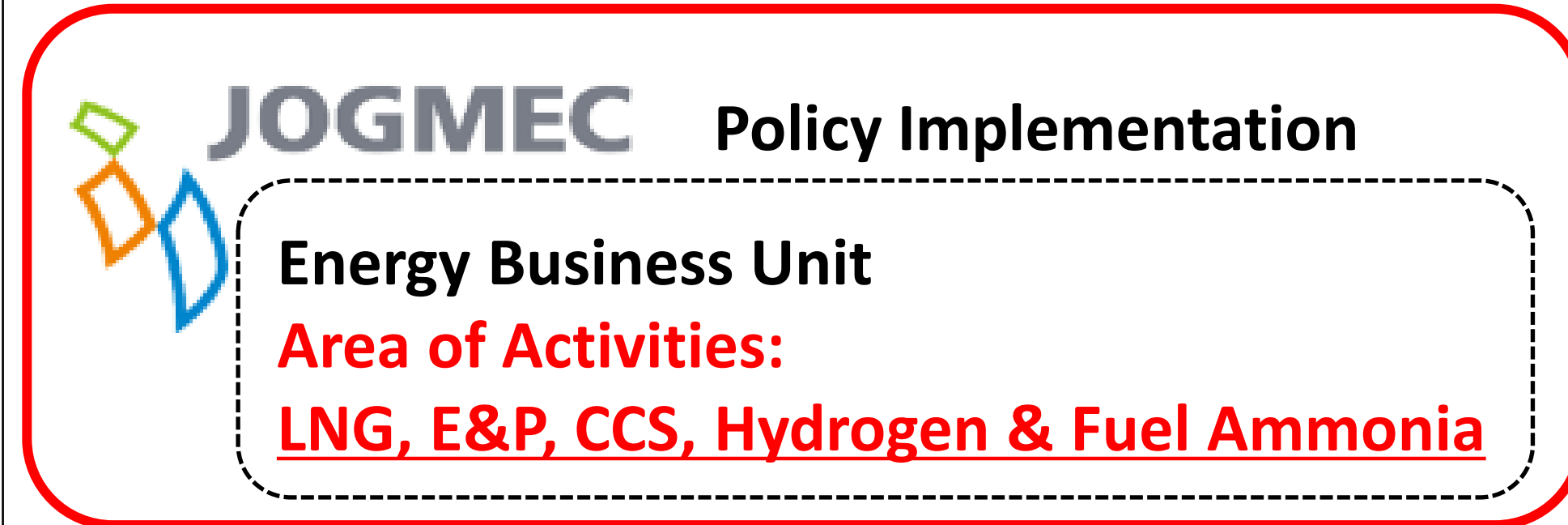
- We are struggling to above goals while keeping **Safety** in mind.



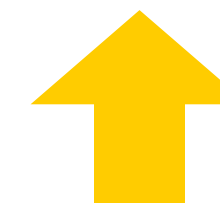
Policy making



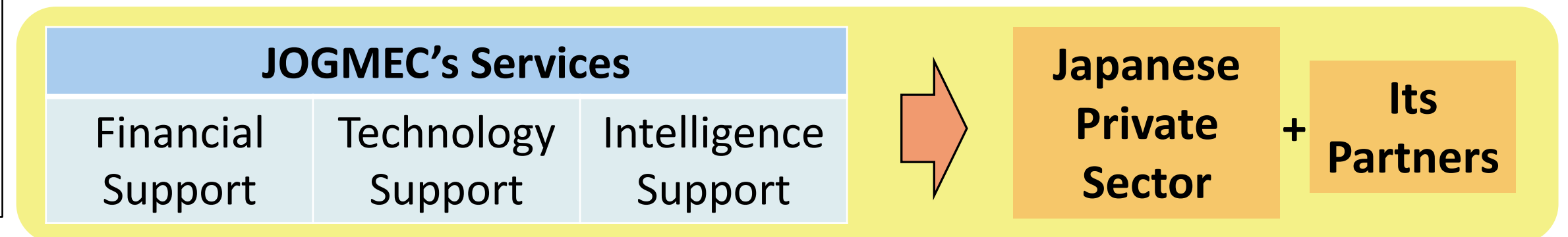
- Intelligence Support
- Policy recommendation



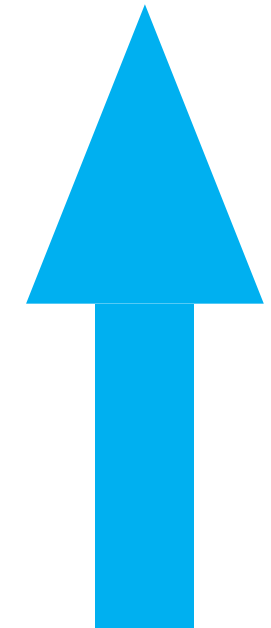
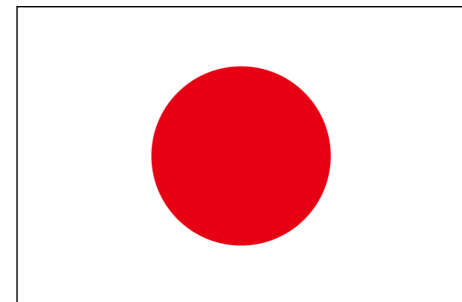
Support Programs



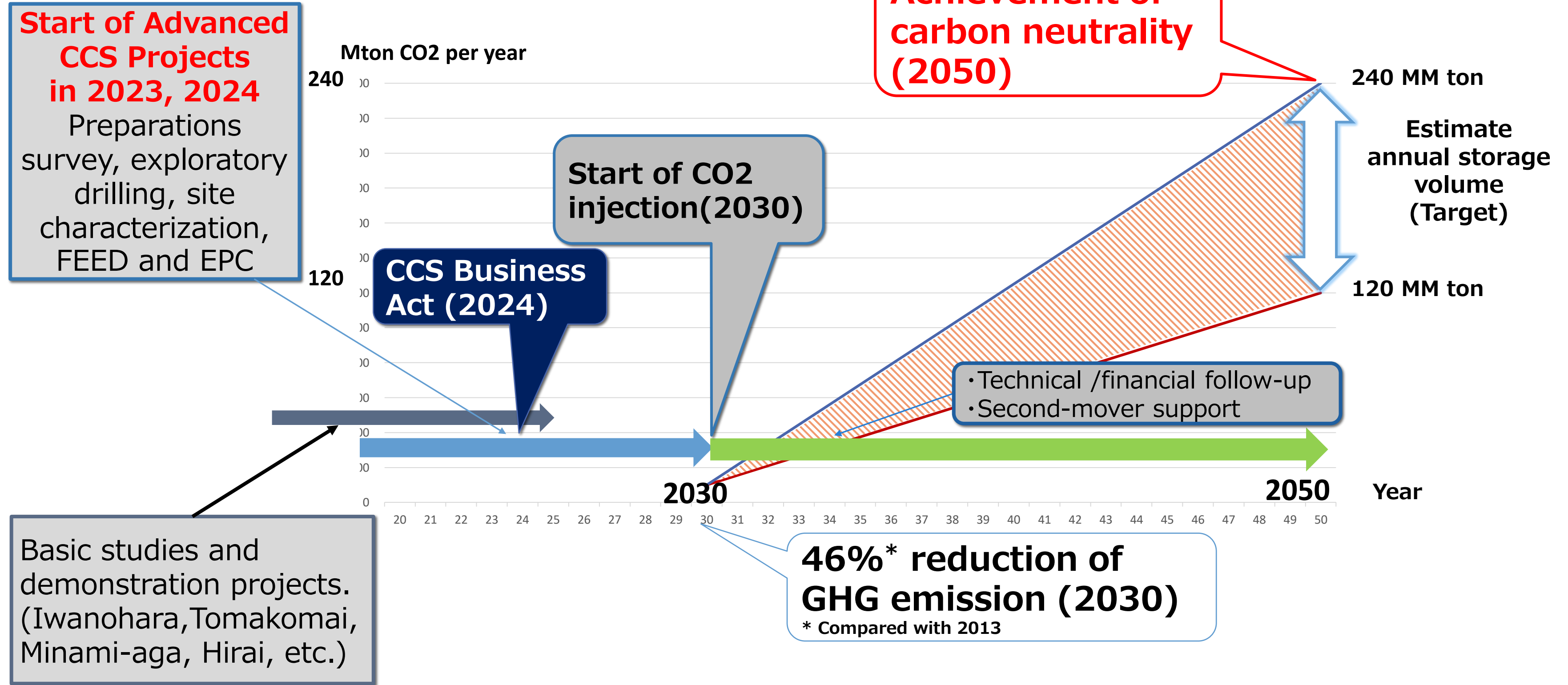
Programs request Application



Stable and Affordable Energy Supply



CCS for 2050 Carbon Neutrality in Japan



Based on METI: May 27, 2022 [20220527_2.pdf \(meti.go.jp\)](https://www.meti.go.jp/press/20220527/20220527_2.pdf)

JOGMEC's support for CCS value chain projects



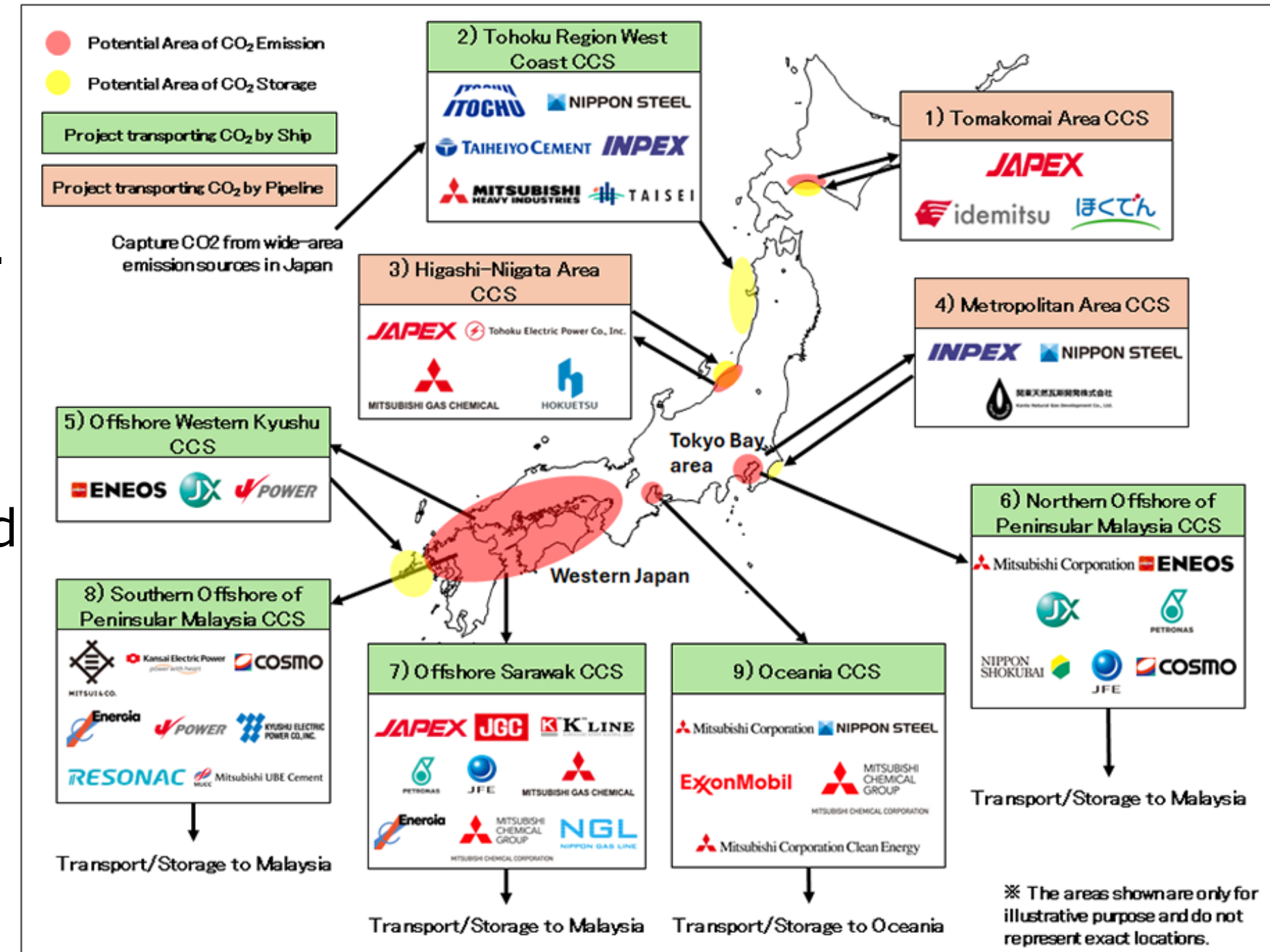
“Japanese Advanced CCS Projects”

- New supporting scheme started in 2023.
- The goal is to inject 6-12 Mtpa of CO₂ by 2030.
- JOGMEC selected 9 role model projects for 2024.
→9 projects store **20 Mtpa** of CO₂ in total
- **Support 100% of the cost** for FS/Pre-study and exploratory drilling.



Contribute to Japan's Carbon Neutrality Goals

- Achieve net zero emissions by 2050
- Reduce emissions by 46% compared to 2013 by FY2030



Location of 9 Japanese Advanced CCS Projects and companies, The 9 projects plan to store approximately **20 million tons of CO₂ per year**

Discussions on LCO2 Ship Transportation in CCS Value Chain

【Background】

- Ship transportation is adopted to 6 out of 9 Advanced CCS projects.
- Cost reduction in entire CCS value chain is necessary for CCS business implementation

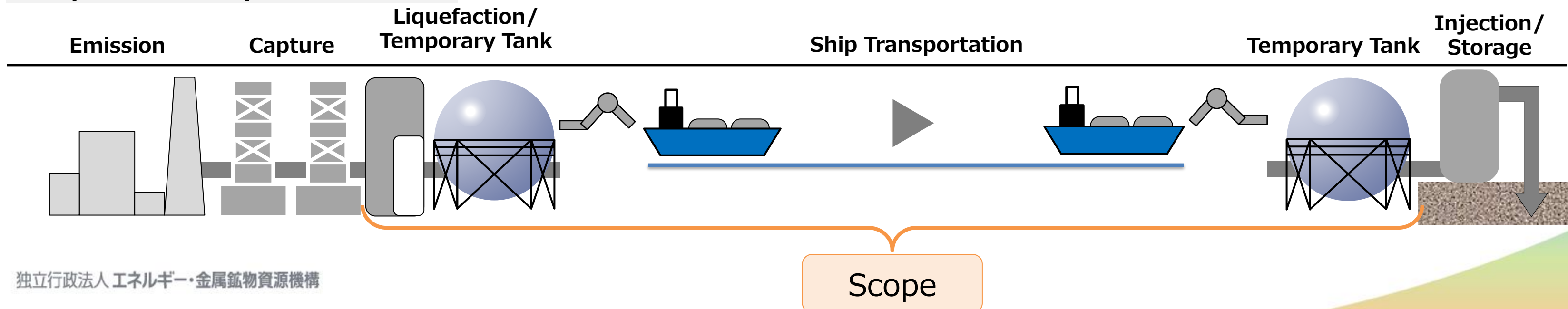
【Objectives】

- To establish economical and efficient supply chain for Advanced CCS projects
- To obtain common understanding various specifications for ship transportation and related facilities in receiving terminal

JOGMEC's role:

- Organizing discussion on various specifications for LCO2 ship transportation
- To develop initial guidance for LCO2 ship transportation by the end of FY2024

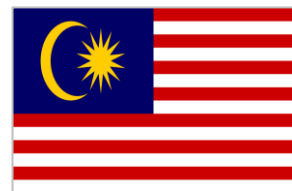
Ship LCO2 transportation flow



JOGMEC's Activities on Cross-border CO2 Transportation in Asia-Pacific



MOC on cross border CO2 transportation [Sep.2023]



PETRONAS
(MALAYSIA)



MOC on CCS partnership (including cross border CO2 transportation) [Aug.2024]

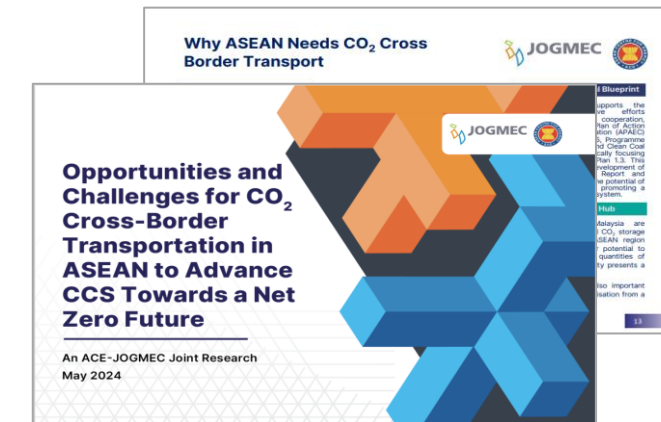


THE MINISTRY OF TRADE AND
INDUSTRY OF THE REPUBLIC
(SINGAPORE)



Collaboration with ACE (ASEAN Center for Energy)

Joint report on cross-border CO2 transportation [May 2024]



https://www.jogmec.go.jp/english/news/release/news_10_00067.html

METI/JOGMEC/Asia CCUS Network's International Workshop on CO2 Cross-border Transport and Storage in the Asia-Pacific Region

[Feb.2024]



Workshop Handbook will be available within 2024 !



https://www.jogmec.go.jp/english/news/release/news_08_00014.html

AZEC: Asia Zero Emission Community
ACN: Asia CCUS Network

JOGMEC's Projects and Cooperation in Asia-Pacific region



JOGMEC's training program

- Energy Transition Training course for 4 countries in Southeast Asia



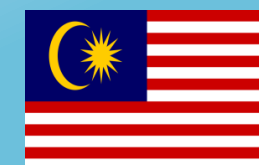
- MOU for cooperation on CCS/CCUS



- Joint Study of CO₂-EOR/CCUS in the matured reservoir
- CCS Joint Study for Clean Fuel Ammonia Production
- MOU for cooperation on Energy transition (CO₂-EOR, CCS, H₂, NH₃)



- MOC on Cross-border CO₂ Transportation
- MOC for Cooperation on Carbon Neutrality (H₂, NH₃, CCS)



- Feasibility Studies on Establishing a Clean Fuel Ammonia Supply Chain and CCS
- CCS for LNG decarbonization
- FEED of CCS Hub project

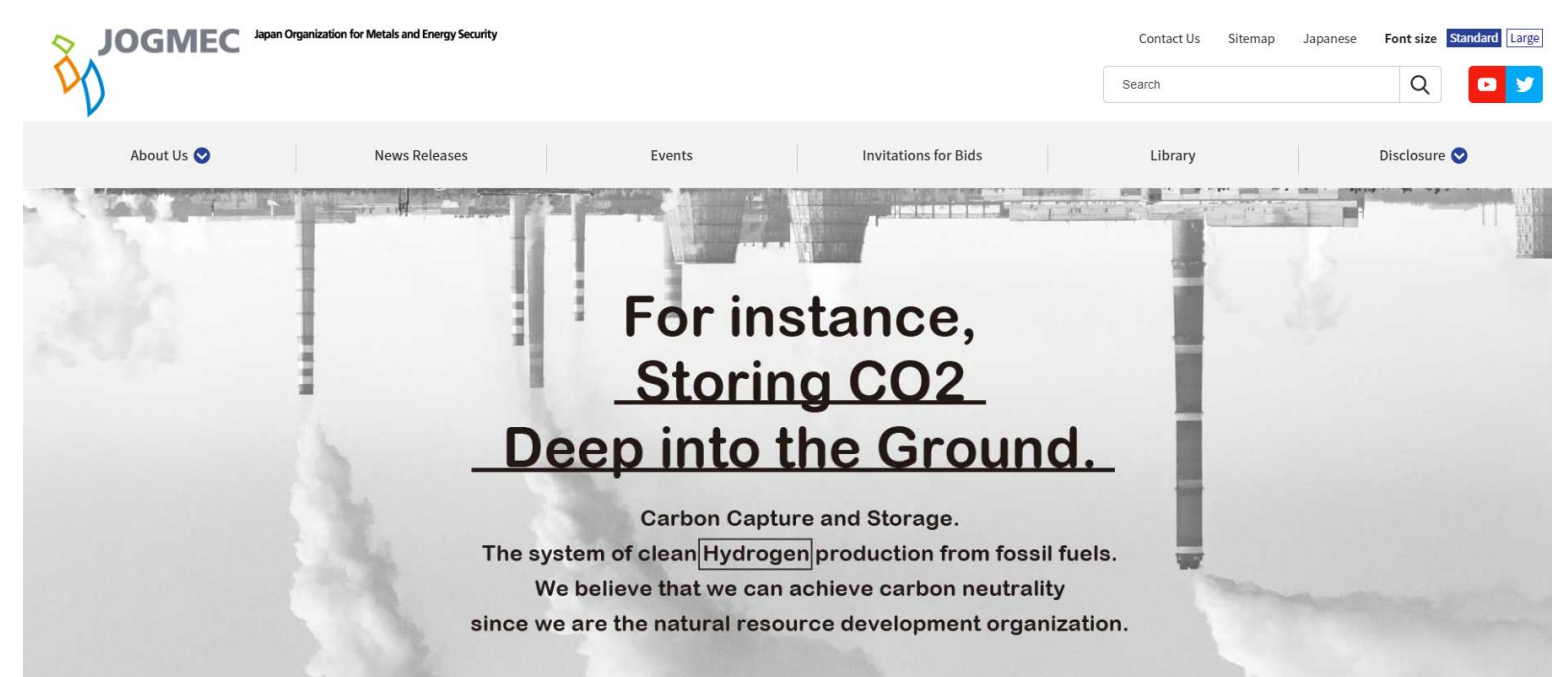


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<https://www.jogmec.go.jp/english/index.html>