MOVE THE WORLD FORWARD MITSUBISHI HEAVY INDUSTRIES GROUP

<CCUS> MHI's Carbon Capture Technology

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About Mitsubishi Heavy Industries (MHI) group

Foundation 1884

Number of Group Companies (consolidated) 259
As of September, 2024

Number of Employees (consolidated) 77,778
As of September, 2024

Order Received 6,684.0 billion yen
April, 2023 - March, 2024

Revenue 4,657.1 billion yen
April, 2023 - March, 2024


Gas Turbine


Fighter Plane


Rocket


Ship


Chemical Plant


Transportation System

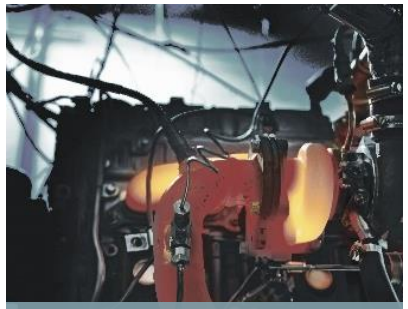

CO_2 Capture


Waste-to-Energy


Metal Machinery


Aero Engine


Compressor


Turbocharger

MHI Group's Declaration to achieve Carbon Neutral by 2040

- In October 2020, the Government of Japan set a goal of achieving Net Zero by 2050.
- MHI declared to achieve the challenging goal of Carbon Neutrality by 2040.

Target Year	Reduce CO_2 emission across MHI Group Scope 1&2	Reduce CO_2 emissions across MHI's value chain Scope 3 + reductions from CCUS
2030	-50% (compared to 2014)	-50% (compared to 2019)
2040	Net Zero	Net Zero

Scope 1 represents CO2 emissions arising directly from MHI Group's operations (fuel combustion and industrial processes)
Scope 2 represents indirect CO2 emissions, mainly from electricity consumption.
Scope 3 represents indirect CO2 emissions arising from other companies across our value chain excluding that covered by Scope 1 & 2.

MHI Group's Declaration to achieve Carbon Neutral by 2040:
https://www.mhi.com/company/aboutmhi/carbon-neutral

MHI's 2024 Medium-Term Business Plan

- MHI announced 2024 Medium-Term Business Plan (MTBP) on May 28th, 2024.
- CCUS commercialization is positioned as a long-term, strategic initiative in growth areas.

5-(2) Commercialize Future Growth Areas: CCUS

- 2021 MTBP: In addition to responding to many inquiries, developed core technologies and products necessary to realize CCUS. Partnered with ExxonMobil and others, a first step in building a CCUS value chain.
- 2024 MTBP: Through the efforts of GX Solutions, aim to scale business by achieving FID in projects with MHI involvement, and by increasing strategic partnerships through technology licensing both inside Japan and around the world

2021 MTBP	2024 MTBP
■ Responded to inquiries and participated in FSs[1] for many CO_2 capture projects in a variety of industries (>50 projects)	■ Receive subsidies from the US Department of Energy, and achieve FID on leading projects such as CCUS hubs and clusters in UK
■ Worked to develop core technologies and products such as a new absorbent, a modular CO_2 capture system, an LCO_2 carrier, a CO_2 compressor, and synthetic fuels	■ Develop next-generation CO_2 capture technologies, and build service infrastructure, including for remote monitoring, in order to enhance competitiveness
■ Created CCS solutions organization through alliance with ExxonMobil. Partnered with licensees around the world.	■ Participate in JOGMEC[2] Advanced CCS[3] Projects

Photo courtesy of Infinium

Build a CCUS value chain

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1 FS: Feasibility Study 2 JOGMEC: Japan Organization for Metals and Energy Security 3 CCS: Carbon dioxide Capture and Storage

※Excerpt from "2024 Medium-Term Business Plan" in MHI IR Library "Commercialize Future Growth Areas"

Global emission reduction targets

	2030 GHG Emissions *1	Carbon Neutrality Target *1
Japan	-46% (vs. 2013 levels)	2050
USA	-50~52% (vs. 2005 levels)	2050
Canada	-40~45% (vs. 2005 levels)	2050
EU	-55% (vs. 1990 levels)	2050
UK	-78% (vs. 1990 levels by 2035)	2050

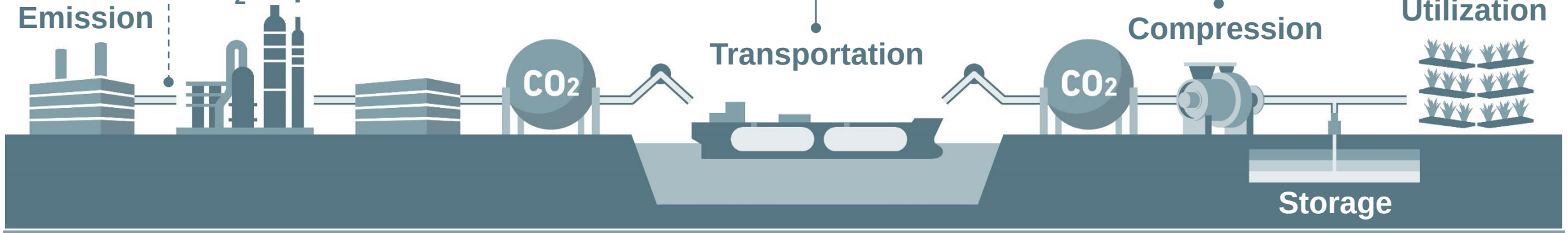
- Difficulty in Final Investment Decision (FID) due to uncertainty in developing of funds and policies in each country.
- Securing both storage of captured CO_2 and viable economics is key for FID.

GHG: Greenhouse Gases
*1 : Nationally Determined Contribution (NDC) recorded in Nationally Determined Contributions Registry

MHI Group's CCUS Value Chain

- MHI group has core technologies essential for CCUS including CO_2 capture, transportation and compression etc., which aims to provide one-stop CCUS solution service.

Air Quality Control Systems (AQCS)



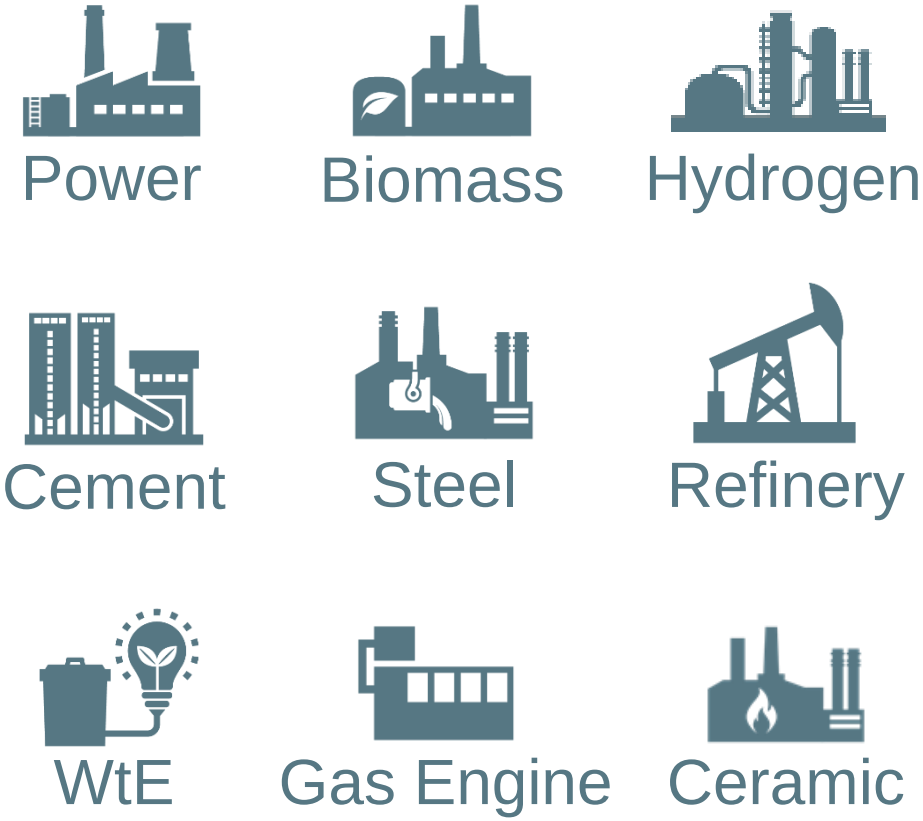
Strengths of MHI's CO_2 capture technology

- **Proprietary technology, World's top market share** (*Post-combustion CO_2 capture)
  18 commercial deliveries worldwide, and acquired knowledge and know-how through many operational experience.

- **More than 30 years Research & Development**
  Joint research started with KEPCO since 1990, owns R&D center for various demonstration tests.

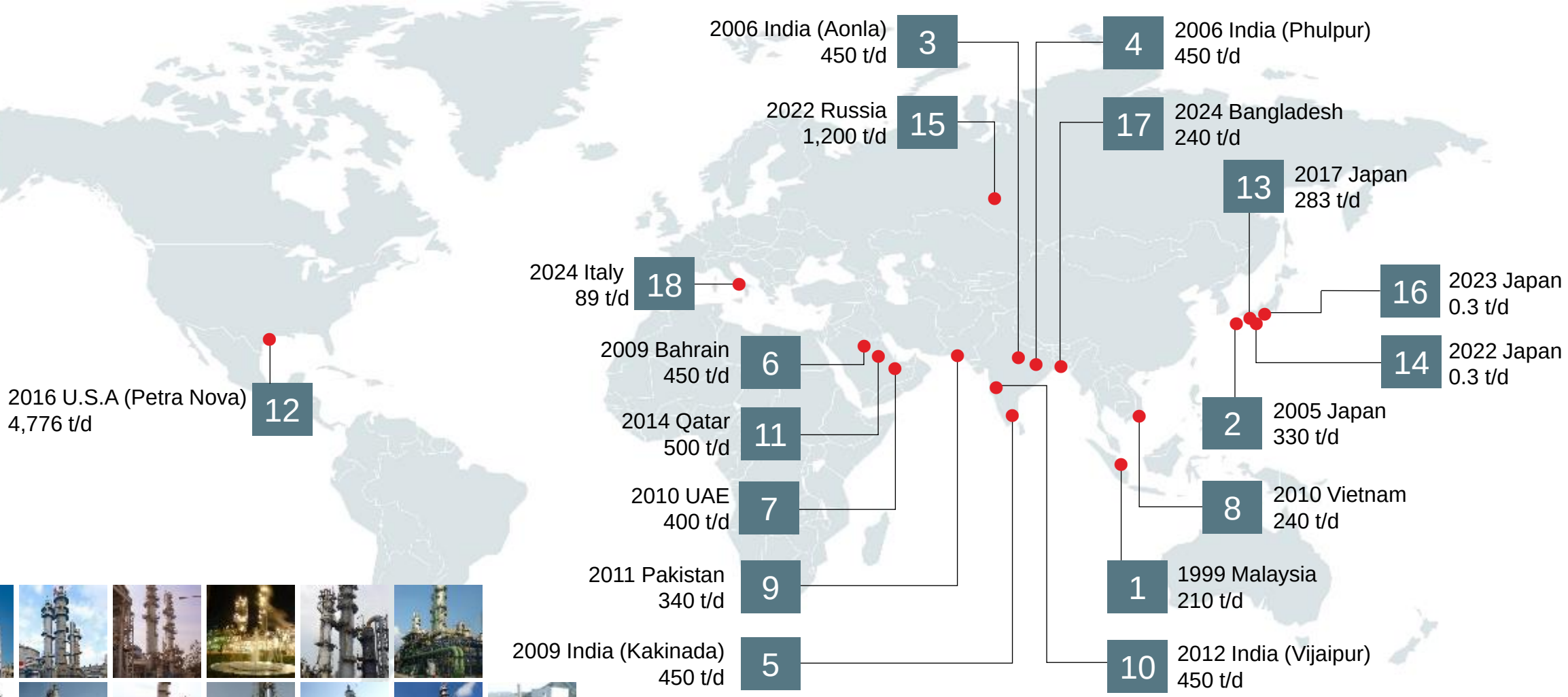
- **Flue gas treatment technology**
  Acquired numerous technologies, operational experience, knowledge and know-how related to AQCS (Air Quality Control System) in power, steel and waste incineration etc., which will be applied as pre-treatment for CCS when required.

Application for various industries



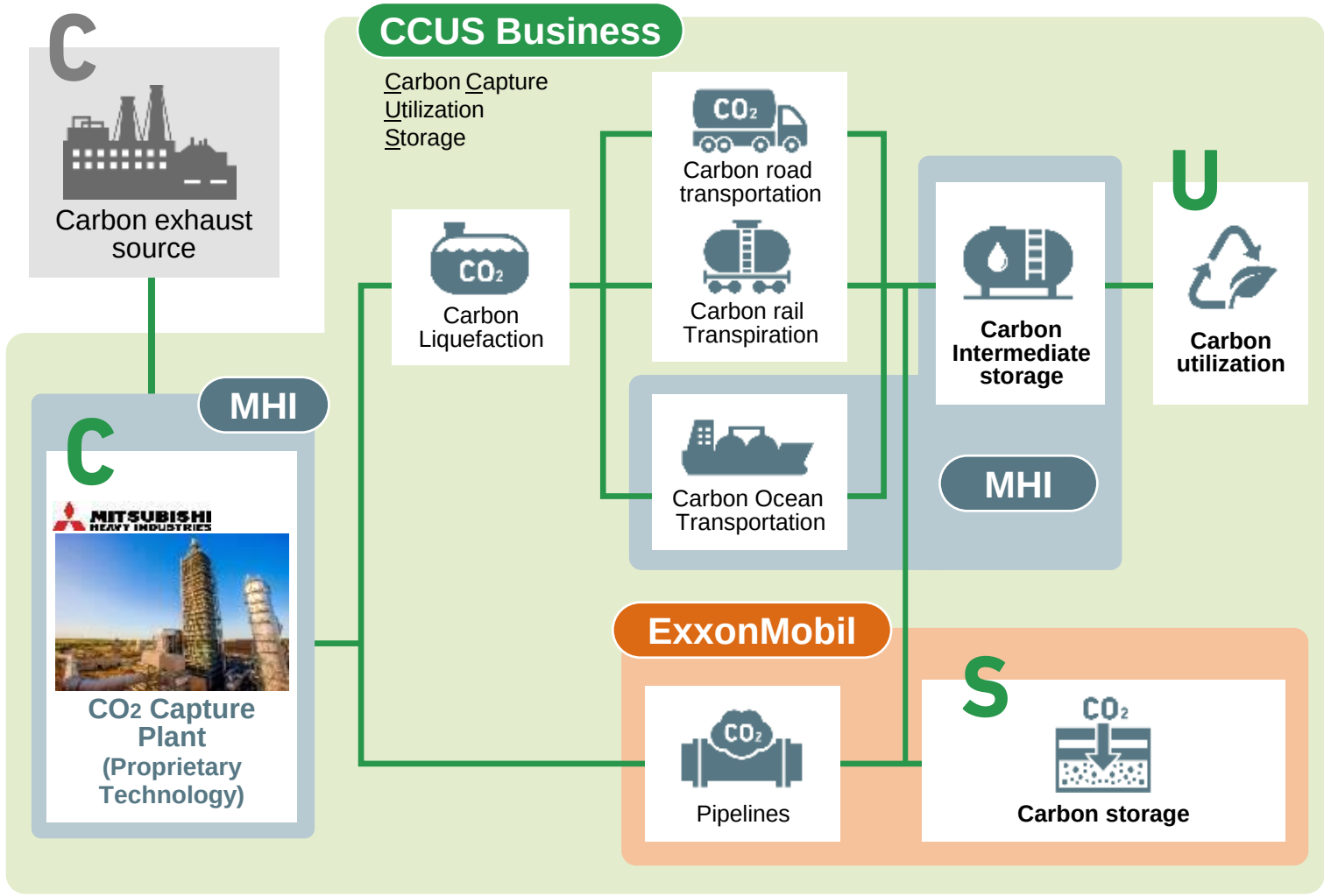
MHI's CO_2 Capture Technology - Commercial Experience

- 18 commercial deliveries worldwide



CO_2 Capture Technology Alliance with ExxonMobil (Agreed in November 2022)

- The joint effort of ExxonMobil's T&S and MHI's CCP will provide customers with end-to-end CCS solutions.
- Combing MHI's CO_2 capture technology and ExxonMobil's CO_2 T&S capabilities can provide solutions with the confidence for performance and effective project execution.



Install a CO_2 Capture Pilot Plant at KEPCO Himeji No.2 Power Station

- The new pilot plant will be installed for R&D of CO_2 capture technology and will use flue gas from the gas turbine at Himeji No.2 Power Station and start operation in 2025.

- By demonstrating the next-generation CO_2 capture technology under the alliance with ExxonMobil, the plant will accelerate R&D aimed at reducing environmental impact and costs, and further strengthen its competitiveness.

Image of CO_2 Capture Pilot Plant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