



Mitsubishi Heavy Industries – at a Glance



Mitsubishi Heavy Industries Group Profile



1884 Foundation



77,000 Employees (Consolidated)



28.0 bil. USD Revenue (FY2023, Consolidated)



Diverse **Products** on Land, at Sea, in the Sky, in Space



250+ Group Companies (Consolidated)



41.7 bil. USD Assets (FY2023, Consolidated)

(150JPY/USD)



H-IIA Launch Vehicle





Turbocharger



(Proprietary Technology)



Transportation System



Compressor







Metal Machinery Waste-to-Energy

Carbon Capture: MHI's KM CDR Process™



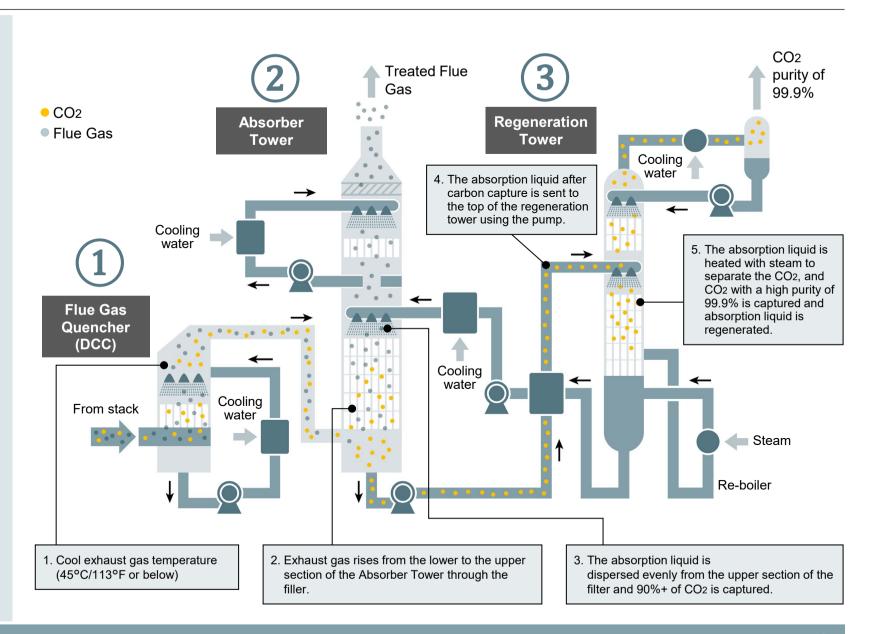
KM CDR Process™

- KM CDR Process[™] =

 Kansai Mitsubishi Carbon Dioxide

 Recovery Process
- Amine-based technology
- Proprietary solvent; KS-1™ / KS-21™
- Capable of capturing 95+% CO2 from combustion gas (depending on source)
- An industry-leading carbon capture rate 99.8% was achieved under modified operating conditions (then absorber outlet CO₂ % is lower than CO₂ content in air)





MHI History of Carbon Capture Technology Development



Pilot test 10t/d





Technology Centre Mongstad

Verification of applicability to various carbon emission sources Several FEED completed and in progress for large scale commercial plants 10.000+ t/d



Advanced KM CDRTM tested in Technology Centre Mongstad (TCM)



Plant Barry 500 t/d demonstration project





Large absorber flow test at Mihara works

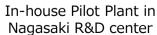
2011~2014

10 t/d coal pilot test at Matsushima

2006

2008

Developed proprietary energy efficient process



1 t/d coal in-house pilot test at Hiroshima R&D Center

2003

(present transferred to Nagasaki R&D Center)

2002

Developed KS-1™ and KM CDR Process™

1991



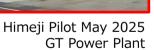
1994

Began R&D with Kansai Electric Power Co.



Pilot Plant in Plant Barry





MHI's Proven Technology and Global Experience



J-Class Experience Exceeds 2,700,000 Operating Hours



75

Units in Commercial Operation

153

Units Ordered

62

Units Exceeding 8,000 Hours MHI has been enhancing our capabilities to capture CO₂ for more than 30 years



1 1999 Malaysia 210 Mt/d 10 2012 India (Vijaipur) 450 Mt/d 450 Mt/d 2 2005 Japan 330 Mt/d 11 2014 Qatar 500 Mt/d

2006 India (Aonla) 450 Mt/d 2016 USA (Petra Nova) 4,776 Mt/d

2006 India (Phulpur) 450 Mt/d 283 Mt/d

2009 India (Kakinada) 2022 Japan 450 Mt/d 0.3 Mt/d

2009 Bahrain 2022 Russia 1.200 Mt/d 1.200 Mt/d

2010 UAE 400 Mt/d 16 2023 Japan 0.3 Mt/d

2010 Vietnam 2024 Bangladesh 240 Mt/d 240 Mt/d

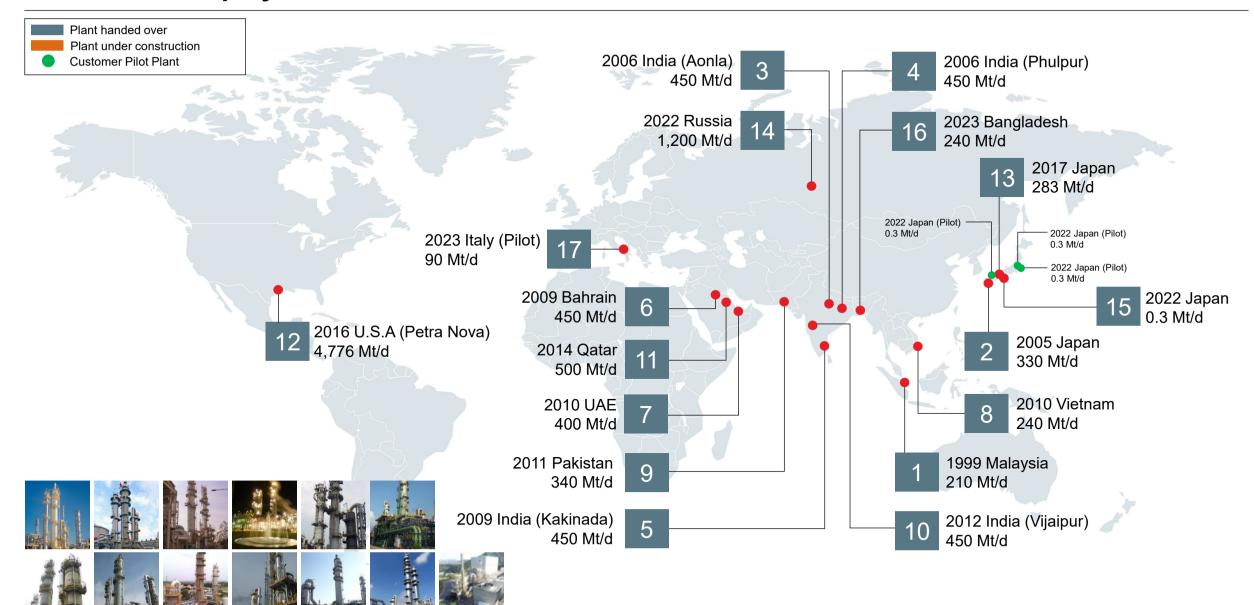
2011 Pakistan 2024 Italy 340 Mt/d 89 Mt/d

*Data as of December 2024

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Commercial Deployment of the KM CDR Process™





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