MITSUBISHI HEAVY INDUSTRIES

POWERING PROGRESS WITH FUTURE-READY TECHNOLOGIES

Mitsubishi Heavy Industries (MHI) Group is a world-leading technology provider spanning energy, smart infrastructure, industrial machinery, aerospace and defense.

For 140 years, we have made bold investments to move the world forward, from land and sea to sky and space. We have a long history of tackling society's most difficult and pressing challenges by creating technologies that improve lives.

Today, we are focused on achieving net zero and building a safe, secure and resilient world. Through **Mission Net Zero**, we aim to reach carbon net zero by 2040, including all emissions associated with our products. This target gives our customers a head start on their own decarbonization journey.

Figures as of March 2025: https://www.mhi.com/company/outline

140
years in business

300
locations worldwide

2040
net zero target

$1.4B+
annual R&D

26,000+
patents

77,000+
employees

DELIVERING LOW-CARBON SOLUTIONS TODAY

We are committed to delivering low-carbon solutions that create impact today while preparing industries for tomorrow, including meeting the rising power demand driven by artificial intelligence (AI).

With decades of experience in the energy industry, MHI Group is trusted around the globe to support resilient and sustainable power systems. Our track record of industrial innovation makes us the partner of choice for businesses navigating the energy transition.

From hydrogen and Carbon Capture Utilization and Storage (CCUS) to highly efficient gas turbines and waste heat to power systems, we provide future-ready technologies that help our customers achieve their decarbonization goals.

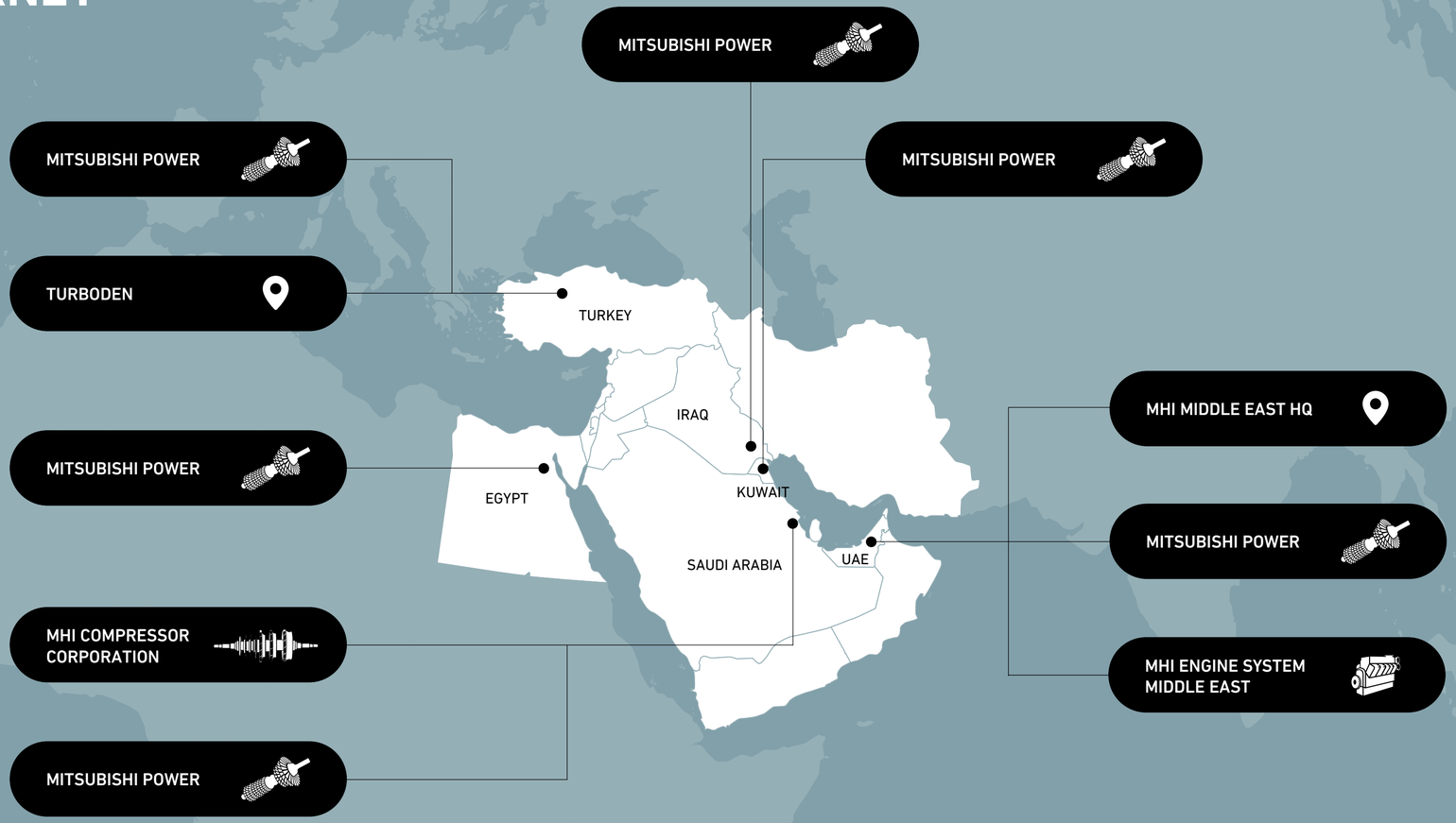
SUPPORTING THE MENA REGION ON ITS DECARBONIZATION JOURNEY

Our global expertise includes the Middle East and North Africa (MENA), where we support the region's ambition to become a thriving hub for sustainable energy.

With a strong regional presence, we specialize in gas turbines, compressors, generators and engines, and are leaders in hydrogen and carbon capture technologies.

Our teams are located in:

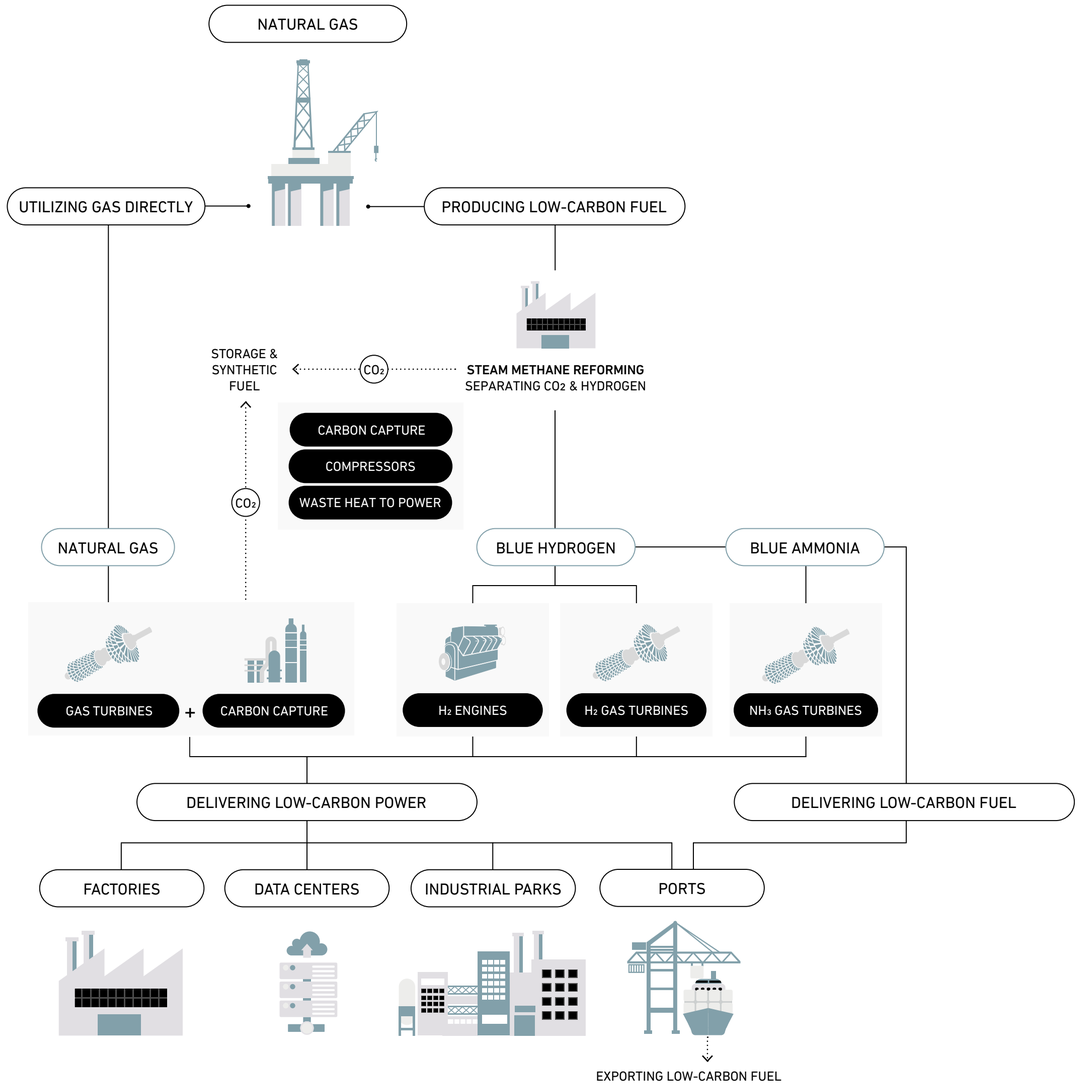
- United Arab Emirates (UAE)
- Saudi Arabia
- Egypt
- Kuwait
- Iraq
- Turkey



VALUE TODAY.
SUSTAINABLE TOMORROW.

Maintaining existing operations while achieving decarbonization goals requires reliable, future-ready technologies. We support our customers throughout the entire value chain for CO_2 and clean fuels, such as hydrogen and ammonia, by delivering comprehensive end-to-end low-carbon solutions for their decarbonization journey.

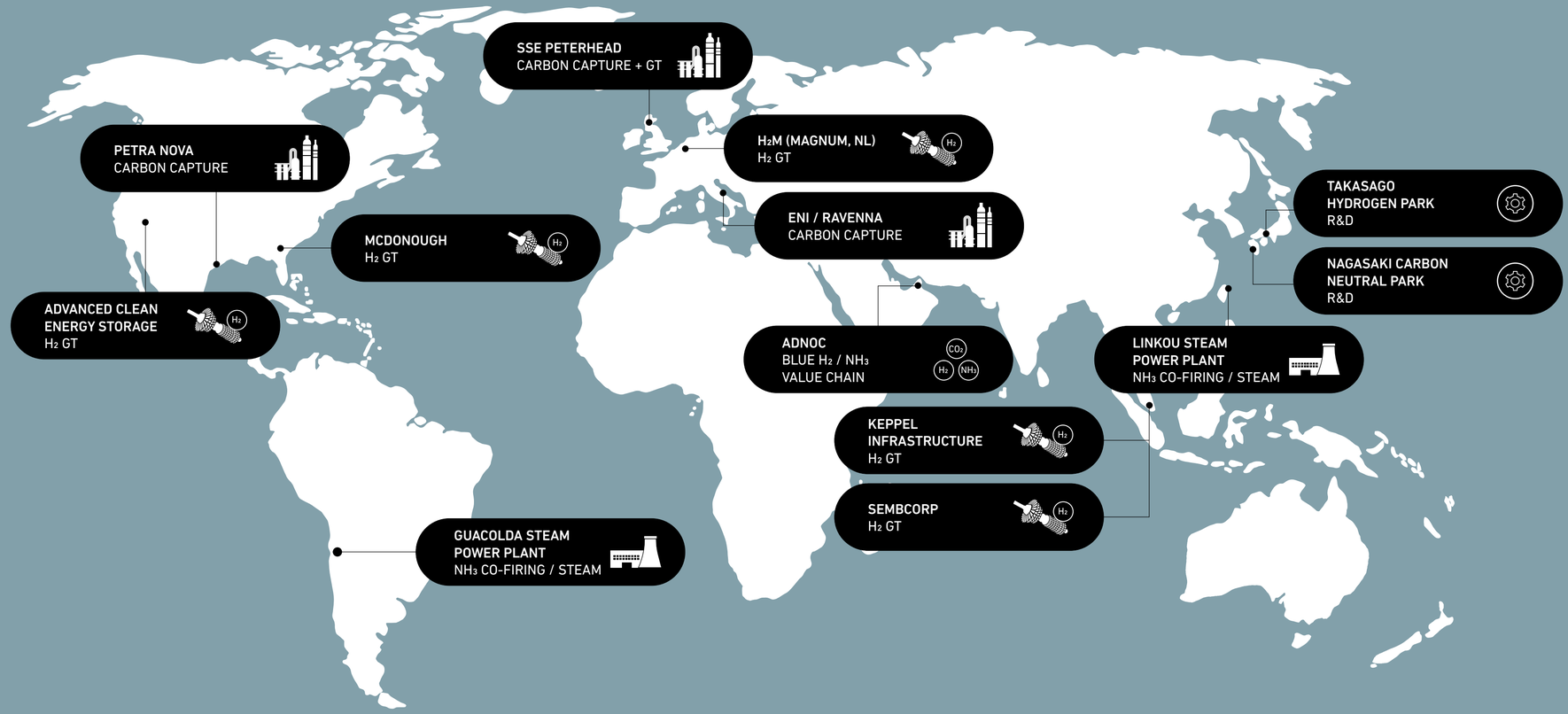
Our technologies are integrated across the energy supply chain, leveraging existing facilities to maximize efficiency and minimize costs. This helps businesses maintain profitable operations and create measurable impact today, while enabling future growth and resilience as new energy value chains emerge.



GLOBAL PLAYER.
LOCAL IMPLEMENTER.

With a network of 300 locations worldwide, we provide low-carbon solutions across six continents.

Our operations are driven by diverse teams with deep local insights who tailor practical solutions to match our customers' needs and capabilities. By combining global expertise with local understanding, we ensure our technologies create maximum impact in every industry and region we serve.



- H₂ GAS TURBINES
- NH₃ CO-FIRING STEAM
- CARBON CAPTURE
- RESEARCH & DEVELOPMENT
- BLUE H₂/NH₃ VALUE CHAIN

NO.1
global market share for post-combustion carbon capture

NO.1
global patent owner in the CCUS field

1,700+
gas turbines in 50+ countries

18
operational carbon capture plants

POWERING PROGRESS: TAKASAGO HYDROGEN PARK

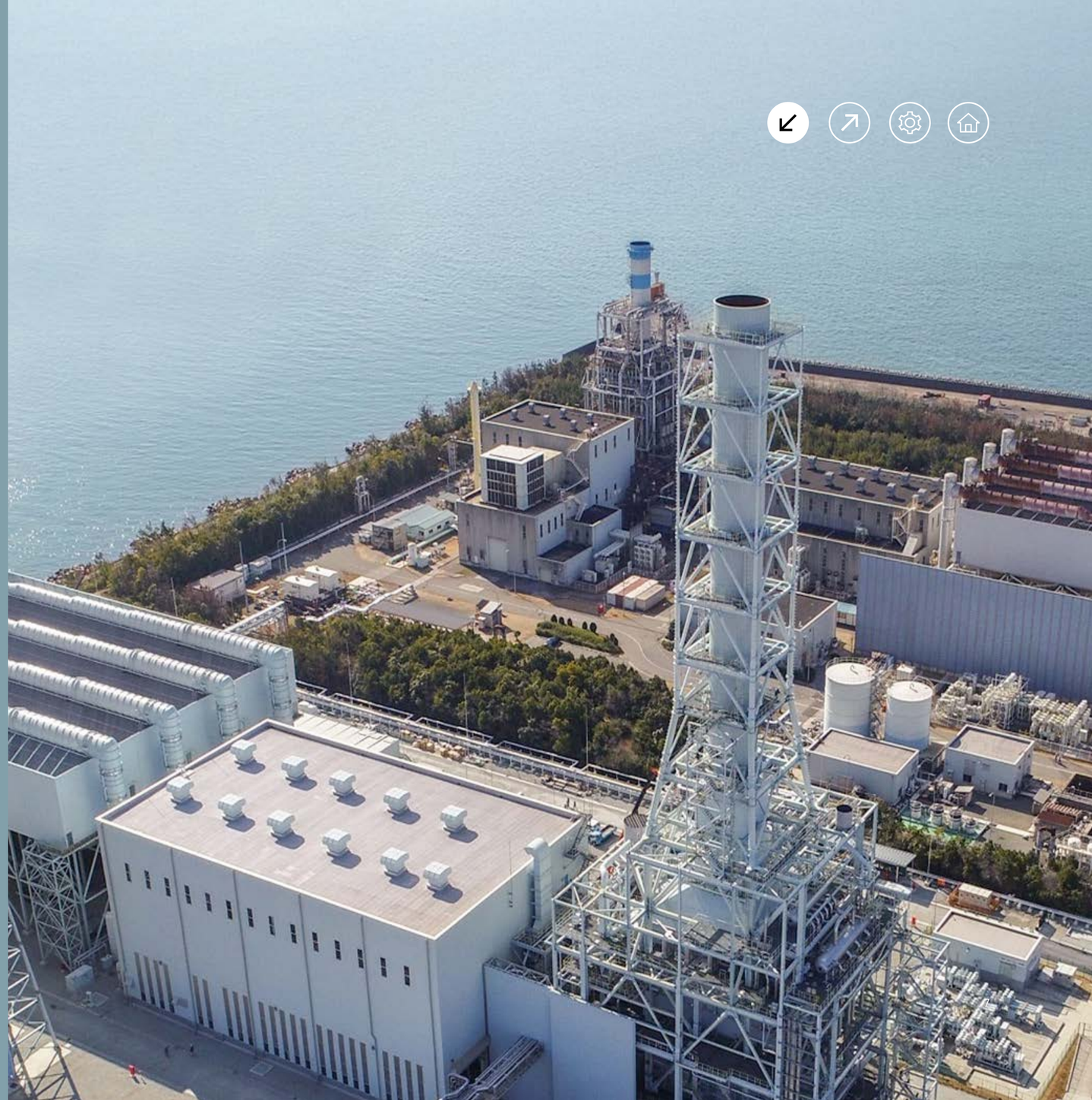
First fully integrated hydrogen R&D facility

Grid-connected testing for safe, reliable performance

Hydrogen will play a vital role in the global transition to net zero. Inaugurated in 2023 at MHI Takasago Machinery Works in Japan, Takasago Hydrogen Park is the world's first fully integrated facility dedicated to hydrogen research and development.

Its unique setup allows our engineers to validate hydrogen technologies from production to power generation, following the same rigorous standards applied to our conventional gas turbines.

The facility is connected to the local grid like a regular power plant, enabling quick identification and resolution of potential risks.
No other company offers a facility like Takasago. Partnering with us gives you access to the industry's most rigorously tested, risk reduced, low-carbon technologies.



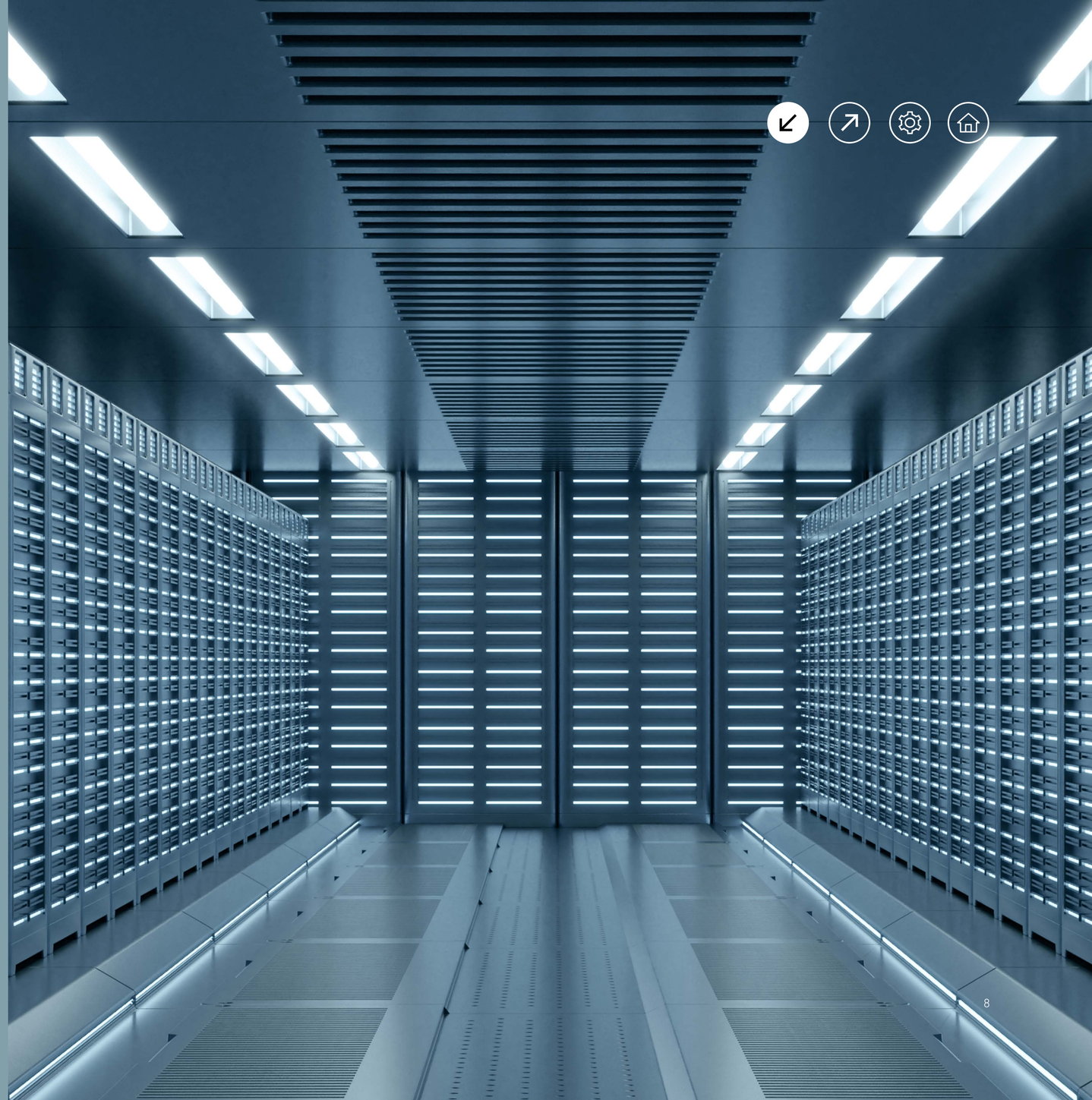
MEETING GLOBAL DEMAND: DECARBONIZING DATA CENTERS

- Reliable power systems for growing data demand
- Digitally optimized for sustainable, low-carbon operations

With the recent surge in AI and cloud services, data centers require power systems that are highly reliable and ready for decarbonization. Drawing on our extensive experience in energy and engineering, we provide solutions designed to meet growing electricity demand with efficiency and resilience.

Our systems combine reliable power generation, including hydrogen-ready turbines, with advanced cooling technologies. These solutions reduce energy use, lower CO_2 emissions and ensure stable, efficient operations even under high loads.

Through integrated control and digital optimization, we enhance operational efficiency and reliability while supporting the transition toward low-carbon data centers that can grow sustainably into the future.



ONE GOAL.
MULTIPLE SOLUTIONS.

While we all share the goal of reaching net zero, we recognize that our customers have unique circumstances and capabilities. That is why we offer a wide range of customizable future-ready technologies and provide comprehensive consultancy and support for your decarbonization journey.

Click on a technology below to find out more:

CARBON CAPTURE

GAS TURBINES

COMPRESSORS

WASTE HEAT TO POWER

ENGINES

CARBON CAPTURE

INDUSTRIES

- Oil & gas
- Chemical
- Energy
- Waste-to-energy
- Steel
- Cement

BENEFITS

- High efficiency
- Stable operation
- Environmental characteristics

MHI Group has been developing the KM CDR Process™ (Kansai Mitsubishi Carbon Dioxide Recovery Process) and the Advanced KM CDR Process™ in partnership with Kansai Electric Power Co., Inc. since 1990. As of September 2025, we have delivered 18 plants using these processes.

MAXIMIZING EFFICIENCY

The Advanced KM CDR Process™ uses the KS-21™ solvent, incorporating improvements over the amine-based KS-1™ to offer superior regeneration efficiency and lower deterioration. It has been verified to deliver excellent energy-saving performance, reduce operation costs and minimize amine emissions. Our technology has been deployed in the world's largest CO_2 capture plant and the first fully integrated carbon capture and storage project on a coal-fired plant.

ENABLING VERSATILITY

The KM CDR Process™ is not just effective; it is versatile. It can be applied to any plant that burns hydrocarbons, including power plants, chemical plants and refineries. Our process can capture more than 90% of the CO_2 from flue gas, and the captured CO_2 is more than 99.9% pure on a dry basis. Our CO_2 capture systems are also designed with a compact, standardized layout, significantly reducing capital costs and enabling rapid deployment, making them ideal for smaller industrial facilities.

GAS TURBINES

INDUSTRIES

- Oil & gas
- Power utilities
- Aluminum
- Steel
- Desalination plants

BENEFITS

- High reliability & efficiency
- Fast start-up
- Clean energy
- Hydrogen-ready

Mitsubishi Power specializes in advanced, reliable gas turbines for utility and industrial applications. In 2022 and 2023, we achieved the number one global gas turbine market share,* with a 56% share in the Advanced Class gas turbine market alone. This success is led by our J-Series gas turbines, which have accumulated over 2.7 million operating hours with leading reliability, flexibility and more than 64% efficiency.

ENABLING CLEAN ENERGY

With over 1,700 gas turbines delivered to over 50 countries, we are trusted worldwide to drive clean energy. Our state-of-the-art J-Series gas turbines can co-fire with a validated hydrogen blend of 30% hydrogen and natural gas, with the capability to transition to 100% hydrogen firing in the future.

DECARBONIZING TOGETHER

Building on more than a century of innovative engineering and over 60 years of heritage in the MENA region, we partner with customers, governments, utilities and industry leaders to achieve decarbonization goals and meet growing demand for power through technological innovation and operational excellence.

*McCoy Power Report 2024

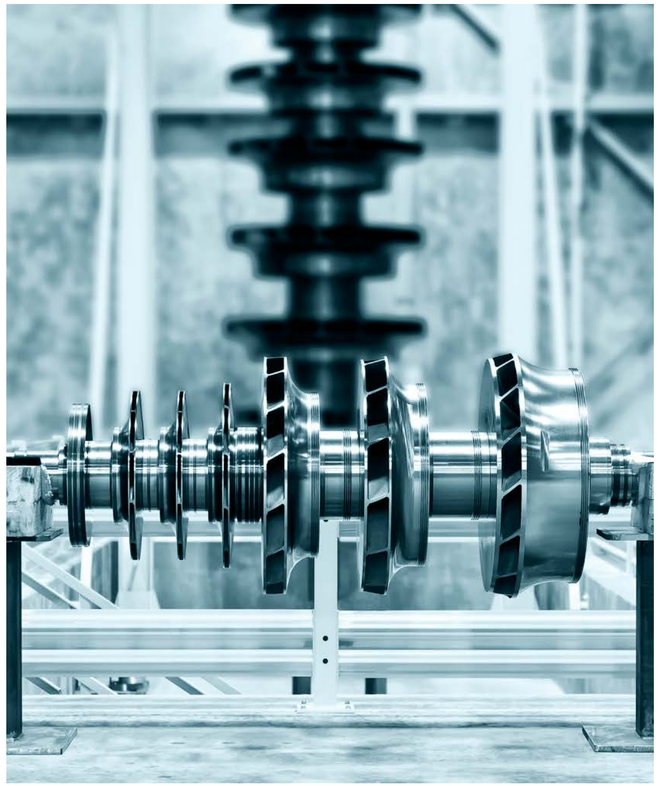
COMPRESSORS

INDUSTRIES

- Oil & gas
- Power generation
- Petrochemical
- Steel

BENEFITS

- High efficiency
- Stable operation
- Reliable after-sales service



Mitsubishi Heavy Industries Compressor Corporation (MCO) is dedicated to supporting our customers' success by providing cutting-edge compression systems that ensure maximum plant reliability, availability and long-term stable operation. With over 4,500 compressors delivered to 66 countries worldwide, we are the global leader in the ethylene, methanol, ammonia and urea plant sectors.

ENABLING CO_2 SOLUTIONS

We design state-of-the-art compressors that deliver safety, reliability and stability. Since the 1990s, we have supplied more than 100 compressors for CO_2 services worldwide, and our systems are deployed in the world's largest CO_2 capture plant.

ACCELERATING INSTALLATION

Our modular gear-integrated type compressor (MAC-G) design enables efficient installation through easy on-site connection of prefabricated piping and instrumentation, reducing installation time and minimizing the need to transport parts.

CUSTOMIZING SOLUTIONS

We tailor our compressors with extensive know-how to meet our customers' CO_2 capture, transport and storage requirements. By providing state-of-the-art compressors with the highest performance in the CCUS market, we help our customers achieve their decarbonization goals and enable a low-carbon future.

WASTE HEAT TO POWER

INDUSTRIES

- Data centers
- Oil & gas
- Iron & steel
- Cement & glass
- Waste-to-energy
- Pulp & paper
- Food & beverage

BENEFITS

- Maximizing energy efficiency
- Seamless integration
- Reusing waste heat
- Zero water consumption

Turboden, a subsidiary of MHI Group, is a global leader in energy efficiency solutions, with a strong focus on waste heat to power. Leveraging our expertise, we deliver tailored systems that capture and reuse waste heat from industrial processes across sectors.

GENERATING POWER FROM WASTE HEAT

Our Waste Heat to Power systems capture heat from industrial processes such as steel production, chemical manufacturing and power generation. The recovered heat can generate electricity, provide heating or be reused directly in the process.

UPGRADING LOW-TEMPERATURE HEAT

Our Large Heat Pump systems recover low-temperature waste heat and upgrade it to a higher temperature for reuse, making them ideal for industries where process temperatures vary widely.

CONVERTING HEAT INTO ELECTRICITY

Our Organic Rankine Cycle (ORC) systems convert low-grade heat into electricity using organic fluids with lower boiling points than water. ORC systems are ideal for medium and low-temperature waste heat sources, such as open-cycle gas turbines, engines and plants in the cement, glass, iron and steel sectors. With power rates ranging from 1 to 35 MW they cover a wide range of applications. An integrated air-cooled condenser allows operation with zero water consumption. This technology is effective for power augmentation in open-cycle gas turbine plants, delivering an additional 20-25% of free-fuel electricity. It provides fast, reliable and cost-effective power for energy-intensive applications, including data centers.

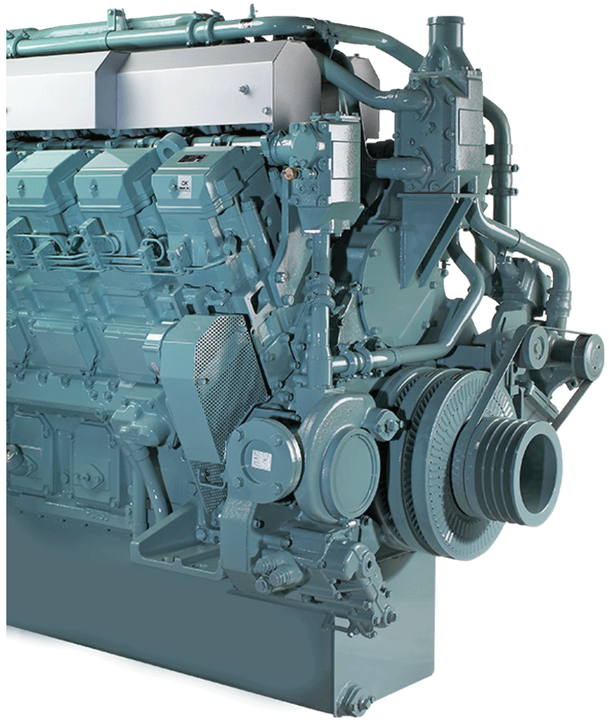
ENGINES

INDUSTRIES

- Distributed power generation
- Data centers
- Off-grid applications
- Shipping

BENEFITS

- Low-carbon emissions
- Seamless integration
- Versatile fuel supply



Hydrogen will transform the energy landscape, and Mitsubishi Heavy Industries Engine & Turbocharger, Ltd. (MHIET) is leading this transformation with its pioneering work commercializing industrial hydrogen combustion engines.

ENABLING SEAMLESS ADOPTION

Our engines are compatible with existing industrial and power infrastructure, allowing seamless integration and offering a low-carbon alternative for distributed power systems and other applications.

DEMONSTRATING RELIABILITY

In 2025, our team achieved rated operation (435 kW/1,500 min^{-1}) using 100% hydrogen fuel in a trial run of a six-cylinder, 500 kW-class hydrogen engine generator set at our Sagamihara Factory in Japan. The demonstration test confirmed stable operation using 100% hydrogen across all phases of the generator set prototype, from engine start to power generation at rated output and system shutdown, while protective measures functioned effectively in emergency scenarios.

ACCELERATING COMMERCIALIZATION

The results of the demonstration test can now be swiftly applied to the final product. Reliability and safety evaluations are ongoing as we advance toward commercialization by 2026.

READY TO DECARBONIZE?
WE'RE HERE TO HELP

If you want to find out more about our future-ready technologies, please get in touch with us at:

info.middleeast@mhi.com

linkedin.com/company/mitsubishi-heavy-industries

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