Mitsubishi Heavy Industries Group Material Issues

Mitsubishi Heavy Industries, Ltd.

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Agenda

1．About Material Issues

2．Initiatives and Progress in FY2025

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1. About Material Issues

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Basic Approach

Activities involving engagement with Material Issues embody sustainability management in terms of business.

To enhance corporate value and grow in the medium to long term through solutions to social issues, in FY2020, MHI Group has identified Material Issues it should be addressing. Progress in each Material Issue is managed with progress monitoring indicators (KPIs), and the PDCA cycle is steadily applied.

Promotion System

In 2021, MHI Group established the Materiality Council to follow up on business activities for realizing the goals of each Material Issue, discuss the future direction of initiatives, and instruct business divisions to take necessary measures. In light of recent changes in the increasingly dynamic external environment, MHI Group recognizes that, in order to achieve sustainable growth, it is important to further develop initiatives addressing Material Issues into more effective measures better aligned with its business strategies. Accordingly, from FY2026 onward, MHI Group will discontinue handling Material Issues through a standalone council and instead incorporate them into its existing management processes.

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Processes of Identifying Material Issues

Step 1 Prioritizing Social Issues

We inventoried the Company's businesses and initiatives, linked them to a list of social issues prioritized in line with international frameworks—including the SDGs, the Global Reporting Initiatives (GRI) Standards, ISO 26000, the SASB Standards, the EU taxonomy and others, and identified social issue themes related to MHI Group.

Step 2 Creating a Materiality Matrix

1. Importance of social issues assessed and mapped along two axes (Vertical axis: degree of impact on society; Horizontal axis: degree of impact on the Company)
2. Material Issues postulated based on the materiality map

Step 3 Verifying Appropriateness

1. Discussion held at Materiality review meetings (consisting of CSR Committee members), and Material Issues narrowed down
2. Dialogue held with three outside experts
   https://www.mhi.com/sustainability/library/pdf/esgdatabook2020_all.pdf#page=12
   [Expert]
   Mariko Kawaguchi: Specially Appointed Professor, Graduate School of Social Design Studies, Rikkyo University
   Toshihiko Goto: Chief Executive Officer, Sustainability Forum Japan Board Member
   Ichiro Sakata: Professor, Graduate School of Engineering Special Advisor to the President Institute of Engineering Innovation, School of Engineering, the University of Tokyo

* Indicated roles and titles are as of the indicated date.

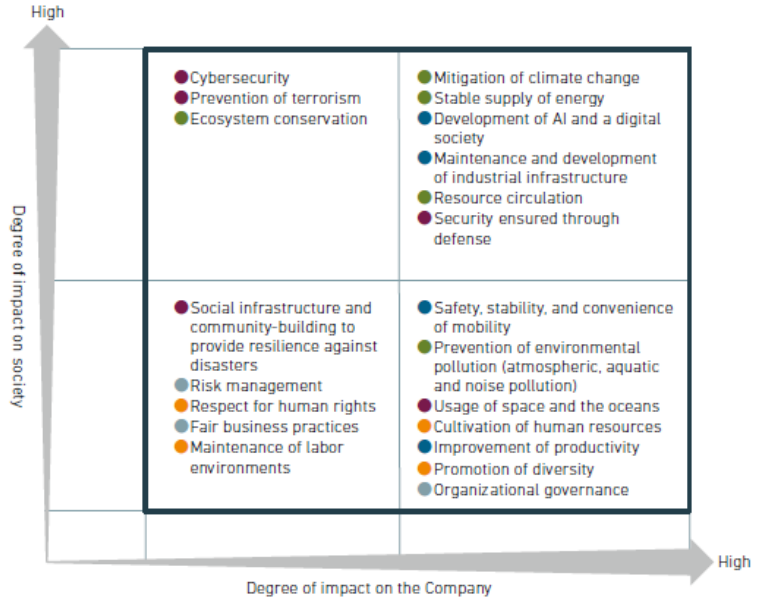
Step 4 Identifying Material Issues

CSR Committee members narrowed Material Issues down to five issues, which were formally finalized after Executive Committee and Board of Directors meetings in September 2020.

Step5 Setting Company-Wide Goals and Progress Monitoring Indicators (KPIs)

1. A task force team comprising young and mid-level employees played a central role in establishing a draft of company-wide goals and KPIs for monitoring progress of materiality
2. These were further considered in materiality subcommittees, and decided upon by the Materiality Council and disclosed

■ Approach to Identifying Material Issues



Five Material Issues identified based on social issues important to MHI Group

Business Contribution (business-related)	Provide energy solutions to enable a carbon neutral world Transform society through AI and digitalization Build a safer and more secure world
Foundation to Support Business (corporate-related)	Promote diversity and improve employee engagement Enhance corporate governance

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2. Initiatives and Progress in FY2025

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Material Issue
「Provide energy solutions to enable a carbon neutral world」(1/2)

Company-wide goals	Progress Monitoring Indicator (KPI)	Scope	Initiatives and Progress in FY2025
Reduce the CO_2 emissions of MHI Group Achieve Net Zero CO_2 emissions from its operation by 2040 (Scope 1 and Scope 2)	Reduce total CO_2 emissions from business activities (Scope 1 and Scope 2) by 50% by 2030 (compared to 2014 levels), and achieve net zero by 2040	MHI Group	• Forecasting an estimated 43% reduction in CO_2 emissions in 2025 compared to 2014 levels. • Ambitiously consolidated and implemented decarbonization solutions at Mihara Machinery Works, which has pioneered initiatives to reduce CO_2 emissions. Continued efforts to develop the facility into Carbon Neutral Transition Hub Mihara, a factory that achieves carbon neutrality in a phased manner.

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Material Issue 「Provide energy solutions to enable a carbon neutral world」(2/2)

Company-wide goals	Progress Monitoring Indicator (KPI)	Scope	Initiatives and Progress in FY2025
Contribution to society throughout the value chain by 2040 Achieve Net Zero CO_2 emissions from its entire value chain by 2040 (Scope 3 + reduction through CCUS[*1])	Reduce CO_2 emissions across the entire value chain (Scope 3 + CCUS contribution for CO_2 reduction) by 50% by 2030 (compared to 2019 levels) and achieve net zero by 2040	MHI Group	• Forecasting an estimated 15% reduction in CO_2 emissions (Scope 3 Category 11) in 2025 compared to 2019 levels. • Began collaborating with a bank to promote decarbonization among SMEs[*2], including our suppliers.
	Develop products and services that contribute to decarbonization of the energy supply by 2040 (Energy Transition)	MHI Group	• Successfully completed a demonstration test of 50%[*3] hydrogen fuel blending using an M501GAC gas turbine at Georgia Power's Plant McDonough-Atkinson in collaboration with Georgia Power. The 50% blend provides an approximately 22% reduction in CO_2 emissions compared to 100% natural gas. • Began operation of a new CO_2 capture pilot plant at KEPCO's Himeji No.2 Power Station, promoting the development of next-generation CO_2 capture technologies. • Conducting various demonstration tests to verify the validity of the design for the Advanced Light Water Reactor "SRZ-1200" as planned. To improve regulatory predictability, continued to exchange views with Japan's Nuclear Regulation Authority (NRA) on new regulations. In addition, for the demonstration fast reactor and HTGR (high-temperature gas-cooled reactor) demonstration reactor projects promoted by the Japanese government, moved forward with the conceptual design as the core company for design and development.
	Develop products and services that contribute to conservation, decarbonization, and automation of the energy use by 2040 (Smart Infrastructures)	MHI Group	• Together with Worley, awarded a contract by Heidelberg Materials to deliver the UK's first full-scale carbon capture facility for a cement works. The project will be the first in Europe to deploy MHI's proprietary Advanced KM CDR Process™ and is planned to capture around 800,000 tonnes of CO_2 annually from Heidelberg Materials UK's Padeswood Cement Works, with the facility set to be operational in 2029. • Partnered with Modius to advance one-stop solutions portfolio for data centers by integrating its AI-driven optimization and energy-saving technologies with power generation, power distribution, cooling, and control technologies.
	Develop and prove new products and services that contribute to the carbon cycle	MHI Group	• Conducted demonstration tests for biowaste treatment and utilization (hydrolysis). • Continued to pursue development of technologies that enable production of carbon-neutral synthetic fuels at high efficiency and low cost, such as sustainable aviation fuel (SAF). As part of these efforts, successfully demonstrated the production of liquid synthetic fuels from CO_2, water, and electricity through an integrated process combining SOEC (Solid Oxide Electrolysis Cell) co-electrolysis and Fischer-Tropsch (FT) synthesis[*4] equipment.

*1 Carbon dioxide Capture, Utilization and Storage *2 Small and Medium Enterprises *3 The hydrogen mixture ratio is expressed as a volume ratio
*4 A technology that produces liquid hydrocarbons from hydrogen and carbon monoxide

Material Issue 「Transform society through AI and digitalization」

Company-wide goals	Progress Monitoring Indicator (KPI)	Scope	Initiatives and Progress in FY2025
Expand lineup of useful and sustainable AI and digital products that meet the needs of customers and users	Gradually increase the scale and number of investments (in services, products, and R&D) in advanced AI and digital solutions that address customer challenges, such as optimizing the operation of energy supply and demand systems.	MHI Group	• Conducted advanced R&D, and shared results across business divisions to support the development of solutions such as AI and digital products/services. • Completed functional testing of a next-generation gas turbine control system for thermal power plants. The system enables advanced control functions that support rapid load adjustments and accommodate diverse fuels including hydrogen. Conducting development and verification toward market launch in FY2026.
Foster a creative environment for developing AI and digital products	Raise employees' awareness of the creative environment.	MHI Group	• Implementing a program to develop 22,000 AI and digital professionals across the Group. Implemented various training programs for 16,622 employees, 76% of the target. • Established a trial environment for the creation of AI and digital products and conducted proof of concept (PoC). In addition, utilizing AI to support employees' daily operations. • Held an employee-participation-based business improvement idea contest to promote the use of AI and digital technologies aimed at halving operational lead times, and received a total of 196 entries. Through the IT department's support in implementing outstanding proposals, advancing company-wide initiatives to utilize AI and digital technologies and improve operational efficiency.

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Material Issue 「Build a safer and more secure world」

Company-wide targets.	Progress Monitoring Indicators (KPI)	Scope	Initiatives and Progress in FY2025
Make products, businesses, and infrastructure more resilient	Assess the impact of various disasters and promote the development and practical application of resilience-oriented designs and technologies	MHI Group	• Formulated a product and service concept that can deliver value in both normal and disaster situations from the perspective of three types of resilience (energy, data, and supply chain). Conducting PR activities and evaluations of implementation benefits for customers. • Continued to advance external deployment of disaster risk assessment technologies that utilize disaster preparedness simulations for tsunamis, typhoons, torrential rains, storm surges, and other hazards. Deployed these technologies in FY2025 in projects for local governments, electric power companies, expressway companies, and other customers. • Established BCM (Business Continuity Management) guidelines for overseas regional headquarters and group companies to promote BCM at overseas facilities.
Unmanned and man-saving products, businesses, and infrastructure	Promote the development and practical application of technologies for remote and automated operation, inspection, and maintenance of products, business and infrastructure.	MHI Group	• Promoting development of logistics intelligent solutions. • Promoting development of energy saving automation systems for data centers. • Promoting development of unmanned vehicles for defense equipment. • Deployed the remote monitoring and operation support system “MaiDAS®“ for waste-to-energy plants at 18 facilities (16 in Japan and 2 overseas). Achieved AI-based automatic combustion control, reducing the number of manual operations by approximately 82% overall. • Completed product implementation of the intelligent operation system for paper converting machinery after verification at a customer’s factory. Order-taking activities began in FY2026. • Promoting development of a platform for collaborative robots designed for manufacturing sites.
Continuous cybersecurity of all MHI Group products deepening of countermeasures	Promote the development and practical application of cybersecurity technologies.	MHI Group	• Continued to conduct cybersecurity-related R&D. • Continued to provide security technologies such as InteRSePT® and Netmation® Protect Pack for key business operations such as defense and energy. • Conducted risk assessments of products and control systems, and security assessments of software and hardware. Implementing corrective measures for items identified as high risk.

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Material Issue 「Promote diversity and improve employee engagement」

Company-wide goals	Progress Monitoring Indicator (KPI)	Scope	Initiatives and Progress in FY2025
Project new value through participation of diverse human resources	Increase the ratio of women on the Board of Directors to at least 30% by 2030	MHI	• Continued our training program for potential future executive candidates in collaboration with each business unit. • Expanded various employee support systems with consideration to childcare and caregiving in order to enable employees to continue their careers. Working to build a workplace environment and organizational culture allowing for a balance of professional and private life.
	Double the ratio of women in management positions by 2030 (compared to FY2021)	MHI Group	
	In accordance with the MHI Group Human Rights Policy, raise awareness of diversity among Group employees through education and other efforts	MHI Group	• 64,000 employees participated in the educational content (e-learning) on respect for human rights in the MHI Group, which was enhanced based on the results of the previous fiscal year.
Ensure safe and comfortable workplaces	Reduce the number of serious accidents to zero	MHI Group (Japan)	• Achieved zero serious accidents in FY2025.
	Maintain a labor (work absence) accident frequency at a rate that is equal to or lower than the industry average		• The rate of lost-worktime injuries was lower than the industry average. • Conducted e-learning training to promote understanding of safety and health policies and to raise safety awareness. 35,000 employees participated in the training.
Improve our environment that maximizes employee performance, and develop human resources who are healthy, energetic and able to contribute to society	Raise the employee awareness survey's "engagement" score above the global average by FY2030	MHI Group	• Established KPIs for each division based on the results of the 5th MHI Group Employee Survey conducted in January 2025. Management, managers, and employees are working together to improve engagement. • Announced pulse survey tool to all MHI Group and continuing operational improvement.

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Material Issue 「Enhance corporate governance」

Company-wide goals	Progress Monitoring Indicator (KPI)	Scope	Initiatives and Progress in FY2025
Further enhance deliberations by the Board of Directors	Maintain the ratio of Independent Outside Directors on the Board of Directors at 50% or more	MHI	• Maintained the percentage of independent outside directors at 50% (6/12) and worked to enhance corporate value and strengthen oversight functions.
	Assess the effectiveness of the Board of Directors annually to ensure and improve it		• Engaged in the following initiatives to evaluate the effectiveness of the Board of Directors in FY2025. ◆ Conducted questionnaires to all members of the board. ◆ Discussed the results of these evaluations in meetings of independent outside directors and reported the same to Board of Directors meetings. ◆ Established policies based on the results of the effectiveness evaluation and finalized the draft of disclosure, both by the resolutions of the Board of Directors. Also started planning the agenda schedule for FY2026.
Promote legal compliance and honest and fair business practices	Maintain the number of serious laws/regulation violations at zero	MHI Group	• There were no serious laws/regulation violations. • Published case studies related to compliance monthly to raise awareness within the company. • Shared compliance information tailored to each region with overseas group companies in an effort to prevent compliance issues. • Ensuring that overseas group companies set up hotlines for reporting on compliance issues.
	Continue activities that promote an open organizational culture		• Implemented the following compliance training for employees both within and outside Japan. ◆ Japan: e-learning, discussion-based training, graded training ◆ Outside Japan: e-learning
Further promote responsible (CSR) procurement in the global supply chain	Promote sustainability and CSR procurement activities with partners to build a sustainable supply chain	MHI Group	• Implemented a CSR questionnaire for Japanese and overseas partner companies with a certain amount or more of regular orders from MHI, and obtained their agreement to the MHI Group Supply Chain Sustainability Promotion Guidelines.
	Offer continuous educative information to suppliers/ business partners in order to establish and maintain sustainable supply chain		• Delivered educational materials on sustainability and CSR procurement when sending the periodical CSR questionnaire for partner companies, and confirmed widespread understanding within each company. • Performed sustainability and CSR procurement education at business partner meetings and business policy briefings.
Create opportunities to explain non-financial information	Conduct Sustainability briefings to investors at least once a year	MHI Group	• Organized a briefing and factory tour of the GTCC business in October 2025 for institutional investors and financial analysts, introducing our products and technologies that contribute to solving energy issues toward a carbon-neutral world.

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