

Sustainability

Sustainability and CSR Policy

In accordance with the Three Principles that are at the heart of Our Principles, MHI Group serves as a manufacturing corporation that contributes to societal progress through its business endeavors of delivering products and technologies in support of social and industrial infrastructure worldwide. We shall not only make contributions through its products and technologies to resolve social issues such as environmental problems, but shall also work on resolving a wide range of social challenges through various activities in the process of its overall business and conduct sustainability management in tandem with its business activities. Furthermore, we believe that this fundamentally entails realizing a sustainable society and ensuring a future for people and the planet by providing exceptional products and technologies, conducting business activities that take diverse stakeholders'

interests into consideration and optimally returning profits to all stakeholders.

The MHI Group's CSR Action Guidelines serve as collective standards for all MHI Group employees. These guidelines provide a concrete and easy-to-understand way for employees to consistently keep sustainability in mind as the Group contributes to societal progress through its business endeavors and Our Principles centered on the principles of sustainability.

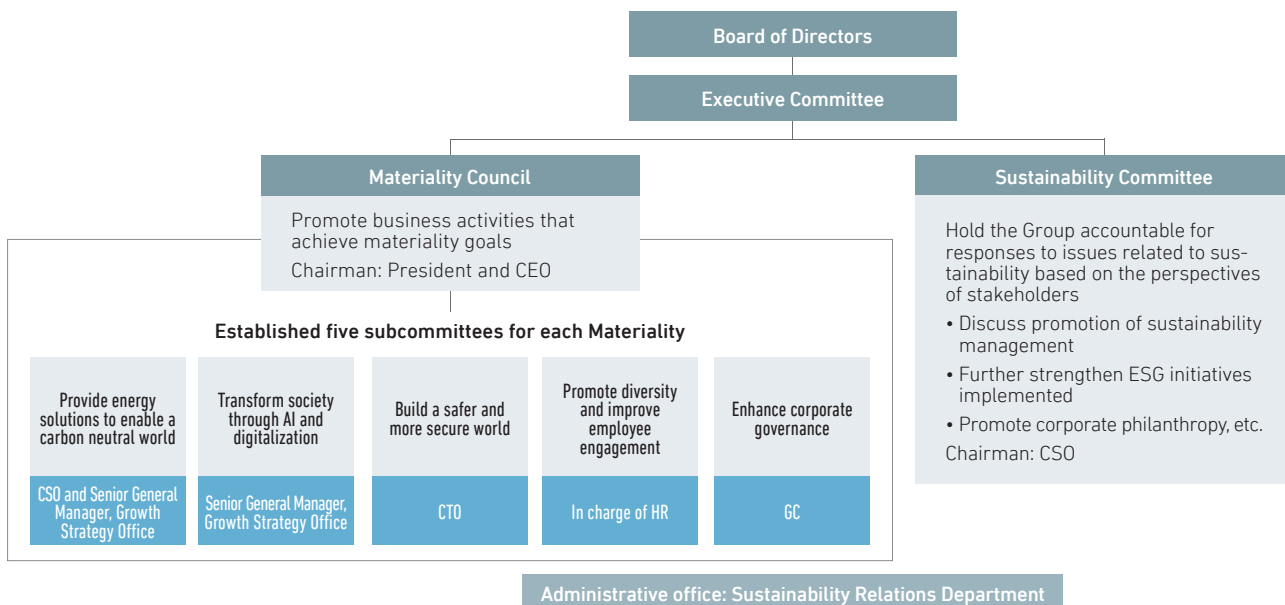
In 2015, we established the MHI Group Global Code of Conduct, a provision of common principles which stipulates how the Group's employees with various backgrounds, nationalities and cultures should act and behave. Regarding the environment, MHI Group has established the Basic Policy on Environmental Matters and Action Guidelines to encourage initiatives to reduce environmental burden based on them in 1996.

Sustainability Promotion System

In order to promote management that takes into account the sustainability of society, we developed and reorganized the former CSR Committee into the Sustainability Committee, and newly established the Materiality Council on October 1, 2021. In consideration of the environmental,

social and economic sustainability of companies demanded by the international community, institutional investors and other stakeholders, we will further strengthen our sustainability management system centered on the issues and values faced by modern society.

► The Sustainability Promotion System Chart



Relationships with Stakeholders

We value input from various stakeholders connected with our business activities, including customers, suppliers, business partners, Group employees and local communities. We place priority on incorporating their input into our management. In addition to sincerely listening to input gleaned from stakeholders in the course of day-to-day business operations, we engage in dialogue with experts

and NGOs having specialized expertise related to sustainability and social issues, striving to incorporate societal viewpoints. We are also building mutually cooperative relationships with NPOs etc. and conducting activities to help resolve global social issues in addition to responding to the needs of and challenges facing communities in which our operations are located.

Conformity with International Norms and Information Disclosure

Being a global company, MHI Group always conducts its business activities in accordance with international codes of conduct. We have participated in the United Nations Global Compact (UNGC) since 2004 and are committed to making ongoing efforts throughout the Group to respect and carry out UNGC's Ten Principles spanning four basic areas: human rights, labor, environment, and

anti-corruption. We promote sustainability activities in accordance with ISO 26000, which was formulated in 2010 as an international guideline on the social responsibilities of organizations. We strive to disclose information on our activities in accordance with international reporting standards such as the Sustainability Reporting Standards of the Global Reporting Initiative.

Human Rights Initiatives

MHI Group is committed to respecting human rights and workers' rights in accordance with international treaties and other guidelines relating to human rights. We value the individual contributions of all people irrespective of race, color, religion, political convictions, gender, age, nationality, sexual orientation, marital status, or disability. We established the MHI Group Human Rights Policy in 2013 and revised it in 2021.

Under this policy, which is based on the UN Guiding Principles on Business and Human Rights, we are building the mechanisms to enhance human rights due diligence, identifying potential adverse impacts on our Group stakeholders, and setting down measures to prevent and mitigate any such impacts, and these efforts began in FY2022.

▶ Human Rights

<https://www.mhi.com/sustainability/social/humanrights.html>

▶ MHI Group Human Rights Policy

https://www.mhi.com/sustainability/social/policy_on_humanrights.html

▶ For the latest information on sustainability, please visit our website at:

<https://www.mhi.com/sustainability>

▶ For more details on ESG, please refer to "MHI ESG DATABOOK."

<https://www.mhi.com/sustainability/library>

Sustainability

Materiality

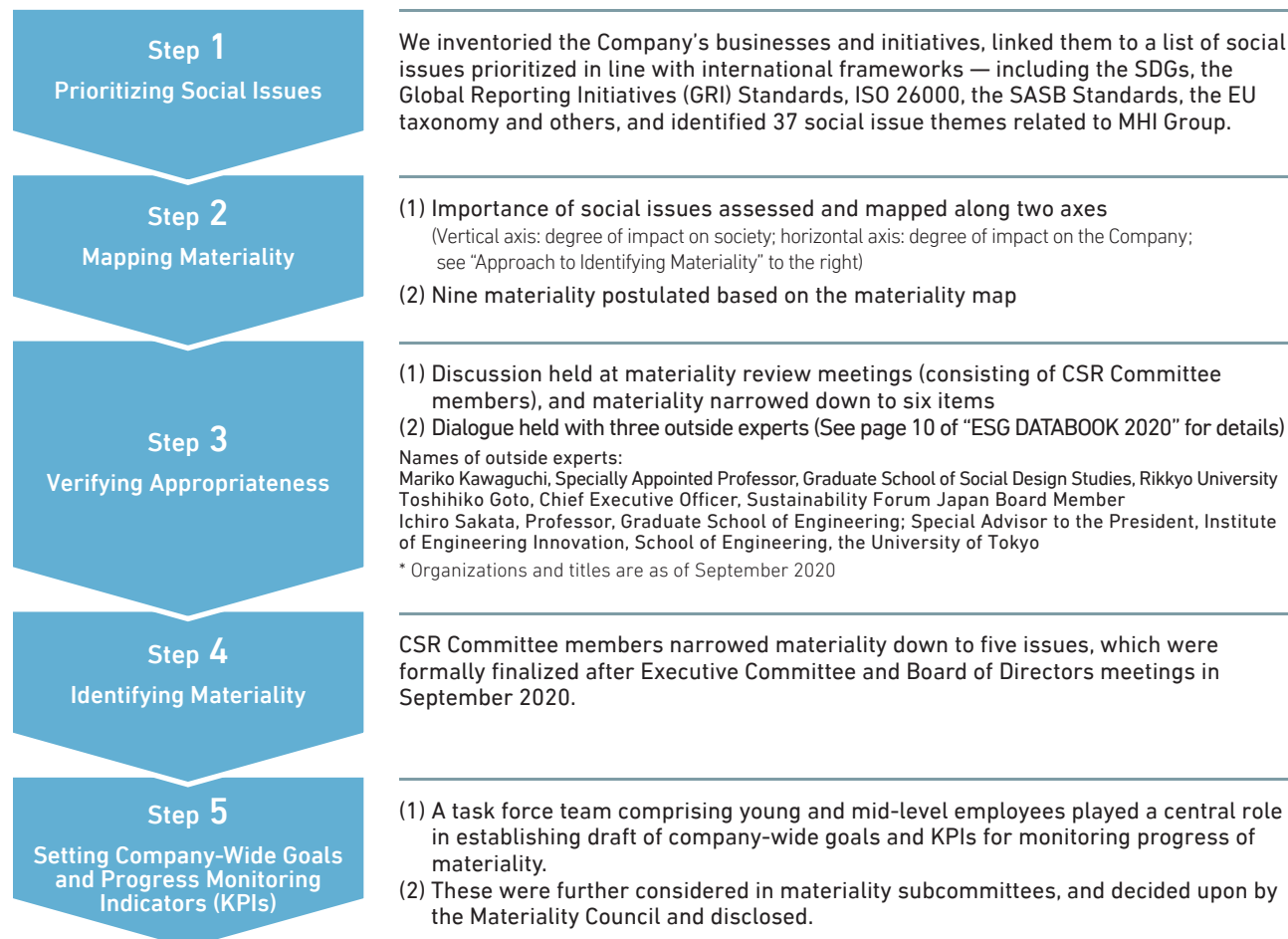
To enhance corporate value and grow in the medium to long term through solutions to social issues, in FY2020 we identified materiality that MHI Group should be addressing. The materiality we identified is reflected in the 2021 Medium-Term Business Plan announced in October 2020. Progress of each materiality is managed with progress monitoring indicators (KPIs), and the PDCA cycle is steadily applied.

Activities that engage in materiality embody sustainability management in terms of business. In order to make materiality activities effective, we have established subcommittees with managers and departments for each materiality, and the person responsible and organizing

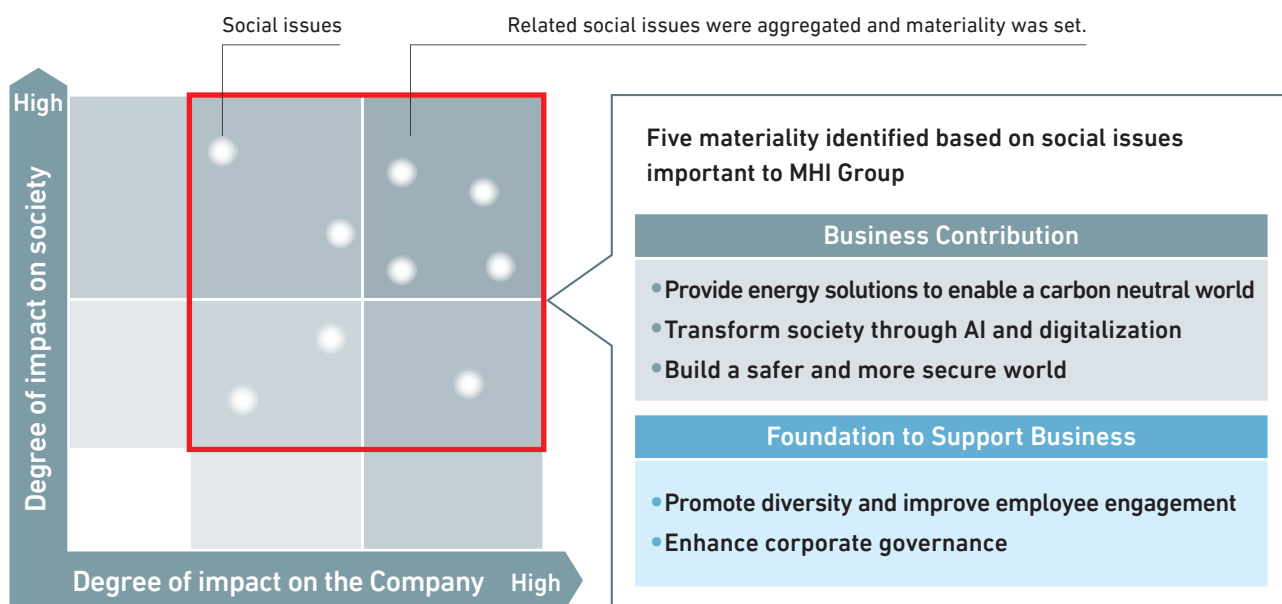
department consider specific measures and roadmaps.

In October 2021, we established the Materiality Council, chaired by the President and CEO and attended by corporate officers and domain/segment heads, to follow up on business activities aimed at realizing materiality goals and to instruct business divisions addressing the goals to take necessary measures. The first meeting was held in December 2021 and the second in June 2022, with information on the progress of each materiality being shared and questions and opinions being freely exchanged. These activities are important themes in sustainability management and are regularly reported to the Board of Directors.

Processes of Identifying Materiality



► Approach to Identifying Materiality



Company-Wide Goals and KPIs (Step 5 of identifying process)

Step 5 of the materiality determination process involves setting company-wide goals and KPIs. This step was performed mainly by a task force comprising young and mid-level employees who will shoulder MHI Group's future. In May 2021, five anchor members of the task force met with outside directors and discussed the goals and metrics.

Whereas many companies set such quantitative management goals and metrics on a top-down basis, the process at MHI was centered on anchor members of the task force. At the meeting, outside directors in attendance said that the discussion of goals and metrics in the context of the connection between social issues and MHI Group's value creation was an excellent experience for the Group and task force members.

The comment on the need for continued proactive discussion will be respected going forward, and we will continue to foster lively discussion.



► For more details on materiality, please visit our website at:
<https://www.mhi.com/sustainability/management/materiality.html>

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Materiality at MHI Group - Company-Wide Goals and Progress Monitoring Indicators (KPI)

Materiality (Officer in Charge)	Company-wide goals	Progress Monitoring Indicator (KPI)
<p>Provide energy solutions to enable a carbon neutral world</p>  <p>▶ CSO and Senior General Manager, Growth Strategy Office</p>	Reduce the CO ₂ emissions of MHI Group. Achieve Net Zero CO ₂ emissions from its operation by 2040 (Scopes 1 and 2)	Reduce total CO ₂ emissions from business activities (Scopes 1 and 2) by 50% by 2030 (compared to 2014 levels), and achieve Net Zero by 2040.
	<p>Contribution to society throughout the value chain by 2040. Achieve Net Zero CO₂ emissions from its entire value chain by 2040 (Scope 3 + reduction through CCUS)</p>	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.
		Develop products and services that contribute to decarbonization of the energy supply by 2040 (Energy Transition)
		Develop products and services that contribute to conservation, decarbonization, and automation of the energy use by 2040 (Smart Infrastructures)
<p>Transform society through AI and digitalization</p>  <p>▶ Senior General Manager, Growth Strategy Office</p>	Expand lineup of useful and sustainable AI/digital products meeting needs of customers and users	Steadily increase the number of newly developed advanced AI and digital solutions (services, products, R&D) that solve customer issues
	Contribute to a sustainable society through future-oriented energy management strategies that use AI and digitalization to appropriately and efficiently manage power supply and demand	Propose optimal energy infrastructures to customers according to the characteristics of the region
	<p>Improve our working environment to produce creative products</p>	Increase the number of products linked to future-oriented energy management systems
		Improve employees' awareness of creative time and environments
<p>Build a safer and more secure world</p> <p>▶ CTO</p> 	Boost the resilience of products, businesses, and infrastructure	Carry out various disaster impact assessments, and promote the development and practical application of resilient designs and technologies
	Implement fully-automated and labor-saving measures	Promote the development and practical application of technologies that enable the remote operation and automatic inspection of products, businesses and infrastructure
	Continuously strengthen cybersecurity measures for all MHI products	Promote the development and practical application of cybersecurity technologies
	<p>Promote diversity and improve employee engagement</p>  <p>▶ In charge of HR</p>	Project new value through participation of diverse human resources
<p>Ensure safe and comfortable workplaces</p>		Double the ratio of women in management positions by 2030 (compared to FY2021)
		In accordance with the MHI Group Human Rights Policy, raise awareness of diversity among Group employees through education and other efforts
		Reduce the number of serious accidents to zero
<p>Enhance corporate governance</p>  <p>▶ GC</p>	Further enhance deliberations by the Board of Directors	Maintain the ratio of Independent Outside Directors on the Board of Directors at 50% or more
	<p>Promote legal compliance and honest and fair business practices</p>	Assess the effectiveness of the Board of Directors annually to ensure and improve it
		Maintain the number of serious laws/regulation violations at zero
		Continue activities that promote an open organizational culture
<p>Further promote responsible (CSR) procurement in the global supply chain</p>	Promote sustainability and CSR procurement activities with partners to build a sustainable supply chain	
	Offer continuous educative information to suppliers/business partners in order to establish and maintain sustainable supply chain	
<p>Create opportunities to explain non-financial information</p>	Conduct ESG briefings to investors at least once a year	

*1 CO₂NNEX: A digital platform aimed at transformation into a new society maximizing the environmental contribution value of CO₂.

*2 TOMONI®: An intelligent digital solution that makes energy systems smarter by using advanced control technology, artificial intelligence (AI), machine learning and multi-layered cybersecurity.

*3 QoEn®: A proprietary MHI indicator that quantitatively shows the ideal direction for high-quality energy infrastructure based on social, economic and environmental aspects.

	Scope	Progress and Topics in FY2021
	MHI Group (Global)	<ul style="list-style-type: none"> In October 2021, we announced MISSION NET ZERO, our goal to make MHI Group carbon neutral by 2040, declaring that we will contribute to the reduction of society's CO₂ emissions with our products, technologies, and services. Started preparations to realize a Carbon Neutral Factory, which will achieve zero CO₂ emissions by the end of FY2023 by supplying all of the electricity required by our Mihara Machinery Works (Mihara City, Hiroshima Prefecture) with non-fossil fuel energy.
	MHI Group (Global)	<ul style="list-style-type: none"> Started monitoring CO₂ emissions from products delivered to customers and CO₂ avoided emissions (by SBU each year).
	MHI Group (Global)	<ul style="list-style-type: none"> Started verification test on the separation, capture, and utilization of CO₂ from a waste incineration facility in Yokohama in collaboration with Yokohama City and Tokyo Gas Co., Ltd. Concluded a construction agreement for the world's first demonstration test ship for the marine transport of liquefied CO₂ supporting CCUS. Implemented measures to improve safety in compliance with new regulatory standards at The Kansai Electric Power Co., Inc.'s Mihama Nuclear Power Plant Unit 3, helping the power company to obtain a grant of extension allowing it to operate more than 40 years (the previous legal limit) for the first time in Japan. Executed a memorandum of understanding for cooperation on fast reactor development with U.S.-based TerraPower.
	MHI Group (Global)	<ul style="list-style-type: none"> In a test of a hydrogen-based fine-ore reduction (HYFOR) pilot plant, 100% hydrogen was used as a reducing agent, resulting in the achievement of nearly zero CO₂ emissions. Jointly worked with Toho Gas Co., Ltd. on a trial of mixed-fuel combustion with city gas (LNG) and hydrogen using a commercial gas engine for a cogeneration system, and achieved rated operation with a hydrogen mixture ratio of 35% by volume for the first time in Japan. Started a verification test of CO₂ capture at a cement plant operated by Tokuyama Corporation in Shunan City, Yamaguchi Prefecture. Started work on digital platform CO₂NNEX™⁴ in cooperation with IBM Japan.
	MHI Group (Global)	<ul style="list-style-type: none"> Started development of biowaste utilization (hydrolysis) and recycle decommissioning of large structures.
	MHI Group (Global)	<ul style="list-style-type: none"> We are pursuing the digital transformation (DX) of products and services through the application of AI and digital solutions such as TOMONI®⁵. We will also perform energy optimization using TOMONI® at Takasago Hydrogen Park in our Takasago machinery works, the world's first facility for integrated verification of technologies ranging from hydrogen production to power generation, with the aim of commercializing hydrogen gas turbines in 2025.
	MHI Group (Global)	<ul style="list-style-type: none"> Started joint research with a financial institution to verify the applicability of QoEn®³, an indicator quantitatively showing the ideal direction for real-world projects based on social, economic, and environmental factors. Started development of a core energy management system (EMS)⁴ with expanded control functions for heating equipment for use in carbon neutral EMS products.
	MHI Group (Global)	<ul style="list-style-type: none"> The following were implemented in order to make MHI a more creative workplace: <ul style="list-style-type: none"> Workplace : Launched an internal community site and advertised it within the Company. Education : Improved employee education by implementing DX literacy courses and online seminars on the themes of service business expansion and DX implementation. Productivity : Started providing data visualization tools within the Company with the aim of increasing productivity with digital technologies.
	MHI Group (Global)	<ul style="list-style-type: none"> Developed natural disaster prevention simulation technology able to predict infrastructure damage and suggest measures to mitigate damage in natural disasters and large-scale accidents. Commercialized air purifying equipment for large spaces using electrostatic precipitation and electrical discharge-based ozone generation technologies used in power plants.
	MHI Group (Global)	<ul style="list-style-type: none"> Confirmed the basic functionality of a prototype next-generation unmanned forklift. (ΣSynX: Sigma SynX⁵) Developed the MalDAS®, AI-based remote monitoring and operational support system for supporting sustainability of waste incinerator plants.
	MHI Group (Global)	<ul style="list-style-type: none"> Developed a cybersecurity monitoring and maintenance service. Expanded research and development investment in cybersecurity technology in FY2021 by 2.5 times versus FY2020 levels and pursued the development of an industrial control system security solution.
	MHI	<ul style="list-style-type: none"> Implemented planned guidance and training program for potential future executive candidates, both male and female.
	MHI Group (Global)	<ul style="list-style-type: none"> Expanded various employee support systems with consideration to such factors as childcare and caregiving in order to allow employees to continue their careers. Working to build a workplace environment and organizational culture allowing for a balance of professional and private life.
	MHI Group (Global)	<ul style="list-style-type: none"> Started development of educational materials on the topic of respecting human rights in MHI Group.
	MHI Group (Japan)	<ul style="list-style-type: none"> Implemented measures tailored to risk profiles in each workplace, and achieved zero accidents resulting in fatality or serious injury. The rate of lost-worktime injuries was slightly higher than the industry average. Conducted early detection and root cause analysis based on data from past accidents, and studied and developed countermeasures across divisions.
	MHI Group (Global)	<ul style="list-style-type: none"> Created guidelines based on the results of an employee survey, updated dedicated websites, implemented pulse survey tools⁶ to improve Group employee engagement and organizational strength.
	MHI	<ul style="list-style-type: none"> Maintained the percentage of independent outside directors at 50% (6/12), and worked to speed up decision-making processes and strengthen oversight functions. Engaged in the following initiatives to evaluate the effectiveness of the Board of Directors. <ul style="list-style-type: none"> Conducted questionnaires and third party interviews of all members of the board. Discussed the results of these evaluations in meetings of independent outside directors and Board of Directors meetings. Established policies based on the results of FY2021 effectiveness evaluation in accordance with discussions and resolutions of the Board of Directors.
	MHI Group (Global)	<ul style="list-style-type: none"> There were no serious legal violations or misconduct. Case studies related to compliance were published monthly to raise awareness within the Company. Compliance information tailored to each region was shared with Group companies outside Japan in an effort to prevent compliance issues. 10 group companies newly set up hotlines for reporting on compliance issues. Implemented the following compliance training for employees both within and outside Japan. <ul style="list-style-type: none"> Japan : e-learning, discussion-based training, graded training Outside Japan : e-learning
	MHI Group (Global)	<ul style="list-style-type: none"> Implemented a CSR questionnaire for partner companies in Japan with a certain amount of regular orders to MHI, and obtained their agreement to the MHI Group Supply Chain CSR Promotion Guidelines. Delivered educational materials on CSR procurement when sending the periodical CSR questionnaire for partner companies, and confirmed widespread understanding within each company. Performed CSR procurement education at business briefings and meetings with partners.
	MHI Group (Global)	<ul style="list-style-type: none"> Held briefing on Carbon Neutrality, and explained our aim to contribute to the reduction of CO₂ emissions through our products, technologies and services. <ul style="list-style-type: none"> CCUS Briefing (held in October 2021) Carbon Neutrality Briefing (held in March 2022)

⁴ EMS (energy management system): A system using telecommunications technology for real-time tracking, management and optimization of usage of energy (electricity, gas, etc.) in homes, office buildings and factories in order to reduce CO₂ emissions.

⁵ ΣSynX (Sigma SynX): A collection of digital technology for realizing optimal operation through intelligent mechanical systems on MHI's standard platform harmonizing and synchronizing a variety of mechanical systems.

⁶ Pulse survey tools: A means of resolving issues in a way suited to the workplace earlier by conducting surveys using simple questions at a higher frequency than employee surveys.