

Environmental Report 2021

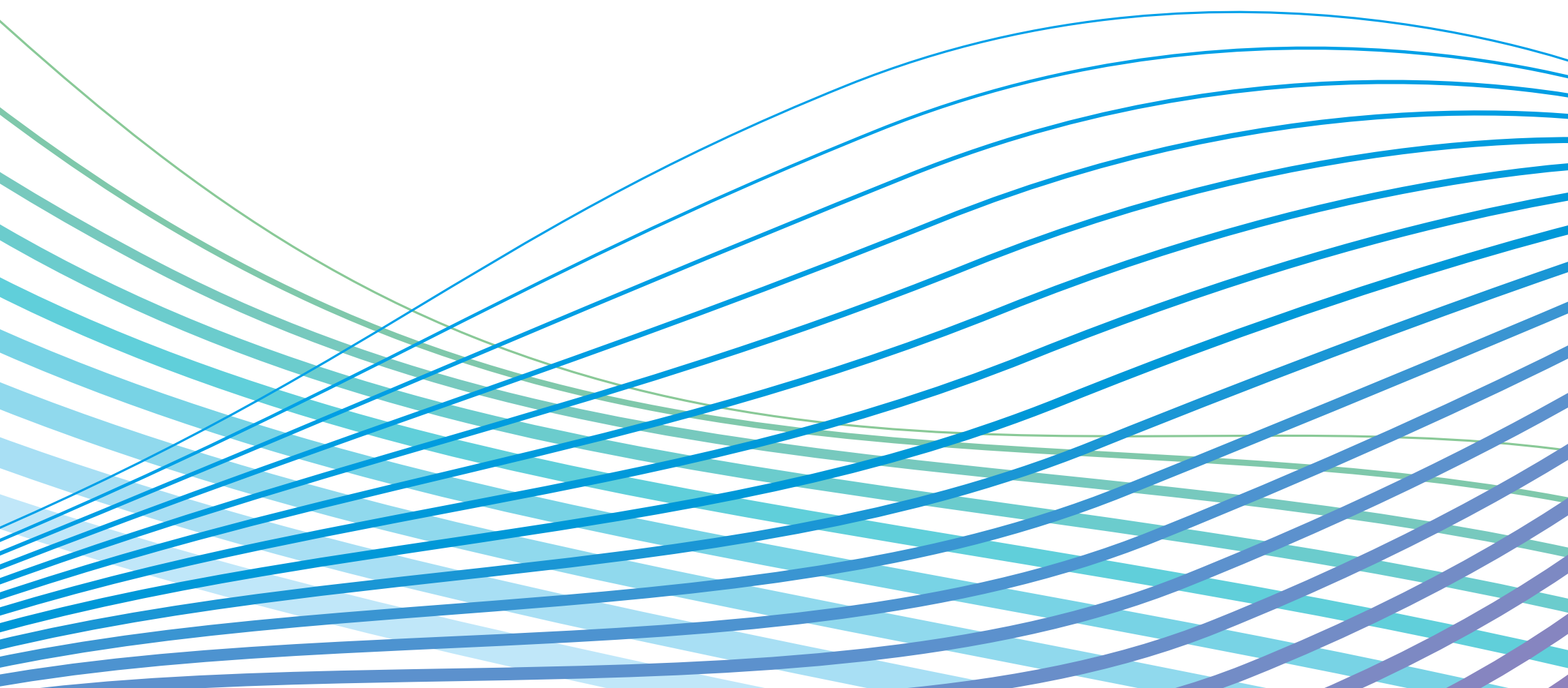


Table of Contents/About This Report

Table of Contents

About This Report	01
Environmental Sustainability Vision	02
Strategy for Climate Change	05
The Structure of Our Environmental Management System	12
Environmental Plan	15
Environmental Considerations for Value Chain Management	18
Design/Development	18
Procurement	19
Production	20
Packaging/Transportation	26
Usage	27
Disposal/Recycling	29
Biodiversity Preservation Activities	30
Environmental Data	34
Comparison of Guidelines	38
Policy/Communication	40

About This Report

This report provides information about the environmental initiatives of the Mitsubishi Electric Group. It primarily reports on significant activities, events, and changes that have occurred in fiscal 2021 (until March 31, 2021). Bearing in mind the PDCA (plan-do-check-act) activity cycle, in reporting our activities we tried to go beyond simply presenting our principles and the actual results of activities to date, to also include information on future policies and issues.

Period Covered by This Report

April 1, 2020–March 31, 2021

* Also includes some information on policies, targets, and plans occurring after the close of fiscal 2022.

Scope of This Report

Covers the activities of Mitsubishi Electric Corporation, 73 affiliates in Japan, and 25 overseas affiliates (total of 99 companies).

References

- ISO 26000
- GRI Standards, Global Reporting Initiative
- Environmental Reporting Guidelines (2018), Ministry of the Environment
- Business Owner Environmental Performance Indicator Guideline (2002), Ministry of the Environment
- Environmental Accounting Guidelines (2005), Ministry of the Environment

Contact Us About This Report

We endeavor to fulfill our responsibility of presenting information to the public in order to broaden our range of communication with stakeholders. We appreciate any and all frank and honest feedback intended to further improve the report.

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Environmental Sustainability Vision

Environmental Sustainability Vision 2050

In recent years, corporations are expected to make long-term, sustained efforts to solve global environmental issues. The Mitsubishi Electric Group's new Environmental Sustainability Vision 2050 defines environmental protection as an even greater corporate priority and stipulates increased initiatives toward this end. It establishes Mitsubishi Electric's future course toward 2050 in the form of the Environmental Declaration, Three Environmental Action Guidelines, and Key Initiatives.

Environmental Sustainability Vision 2050

Environmental Declaration

Protect the air, land, and water with our hearts and technologies to sustain a better future for all.



To solve various factors that lead to environment issues, the Mitsubishi Electric Group shall unite the wishes of each and every person, and strive to create new value for a sustainable future.

Environmental Sustainability Vision 2050

Three Environmental Action Guidelines

1	2	3
Apply diverse technologies in wide-ranging business areas to solve environmental issues	Challenge to develop business innovations for future generations	Publicize and share new values and lifestyles

Key Initiatives

- Climate Change Measures	- Long-term Activities	- Understanding Needs
- Resource Circulation	- Innovation	- Co-create and Disseminate New Values
- Live in Harmony with Nature	- Nurturing Human Resources	- Live in Harmony with the Region

Apply Diverse Technologies in Wide-Ranging Business Areas to Solve Environmental Issues

The Mitsubishi Electric Group shall utilize diverse technological assets throughout wide-ranging business areas, and across the entire value chain, to solve various environmental issues, including climate change, resource recycling and coexisting harmoniously with nature.

Key Activities

Climate Change Measures

- 1) Promoting and disseminating outstanding energy-saving products, systems, services and renewable energy businesses, together with our stakeholders, we will contribute to reducing greenhouse gases worldwide.
- 2) Respecting the global shift toward decarbonization, we will promote the reduction of greenhouse gases throughout the value chain, from development, design, procurement of raw materials and production through sales, distribution, use and disposal. Our present target is to reduce CO₂ emissions to net-zero by 2050*.
- 3) Observing changes in the global environment, we will provide solutions that contribute to minimizing the risks of natural disasters.

Resource Circulation

- 1) Reducing the size and weight of products, we will consider the use of recycled materials and recyclability rate of the products and systems we produce.
- 2) Eliminating resource waste throughout the value chain, we will strive to maximize the effective use of resources.
- 3) We will work to expand the supply of safe, clean water globally, as well as to enforce water treatment that does not pollute oceans and rivers.
- 4) We will promote the effective use of water taking the water environment of each region into consideration.
- 5) We will promote resource recycling businesses globally, such as reuse, repair of products/systems and waste reduction.
- 6) We will aim to achieve 100% effective use of wastes, such as plastics, generated during manufacturing processes.

Live in Harmony with Nature

- 1) Throughout the Group, we will carry out activities to preserve biodiversity in the mountains, rivers, and oceans, and at all business sites, and promote the development of local environments and human resources to be passed to future generations.
- 2) We will work to control, suppress, substitute, and properly dispose of harmful substances that may affect the natural environment.

* Net-zero CO₂ emission by 2050: Achieve net-zero emission by increasing the contribution of power semiconductor devices to reducing greenhouse gas emissions to a level that surpasses the reduction in CO₂ emissions by increasing their efficiency and dissemination.

Challenge to Develop Business Innovations for Future Generations

The Mitsubishi Electric Group shall draw on internal and external strengths, combine them when required to resolve difficult issues, and take on the challenge of developing technologies and business innovations for future generations.

Key Activities

Long-term Activities

- 1) We will set specific indices and action items while considering future prospects in the mid-term Environmental Plan formulated every three years.
- 2) We will verify the validity of long-term goals approximately every five years, doing so considering international agreements, foreign affairs and business conditions.

Innovation

- 1) We will cooperate with other companies and institutions, and use our technological assets, technologies and business synergies to create innovative technologies and solutions.
- 2) We will proactively adopt innovational technologies and solutions that enable us to lead manufacturing in future generations.

Nurturing Human Resources

- 1) We will foster a corporate culture in which employees, as ordinary citizens, take the initiative on creating new lifestyles in harmony with nature.
- 2) We will develop highly specialized human resources who accept diverse values, and proactively work on environmental issues.

Publicize and Share New Values and Lifestyles

The Mitsubishi Electric Group shall promote active dialogue, collaboration, and co-creation with all stakeholders, publicizing and sharing new values and lifestyles that will result in living comfortably, in harmony with nature.

Key Activities

Understanding Needs

- 1) We will work to understand our customers' needs and expectations for the environment through sales activities, exhibitions, events, and other initiatives.
- 2) We will hold discussions with stakeholders, and confirm the validity of our environmental targets and measures, to promote more effective environmental activities.

Co-create and Disseminate New Values

- 1) We will propose new lifestyles that provide the pleasure of contributing to the environment through the use of our products, systems, and services.

Live in Harmony with the Region

- 1) We will hold discussions with local residents and municipalities, and contribute to creating a better local environment, including Satoyama conservation and bio-diversity preservation activities at business sites.

Environmental Activities for a Sustainable Future



Environmental Vision 2021(ended in fiscal 2021)

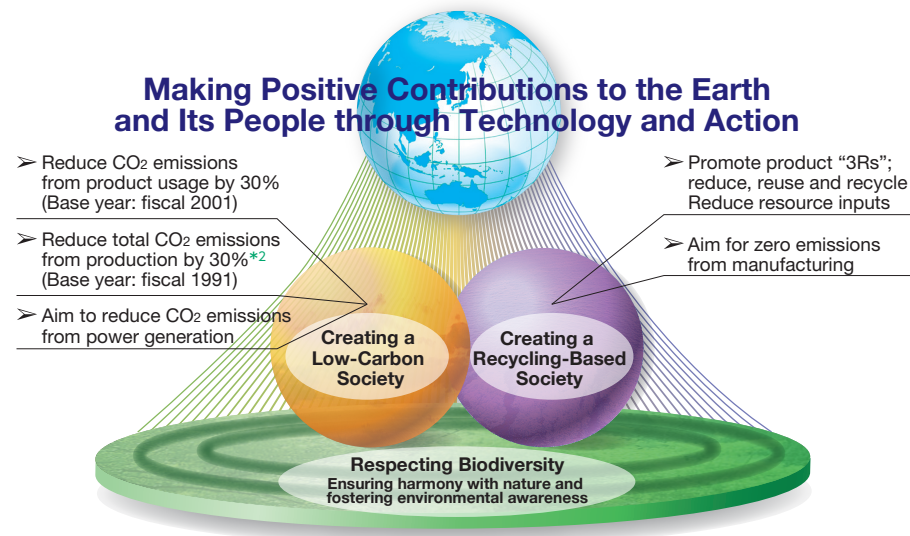
In 2007, Mitsubishi Electric formulated a long-term environmental management vision for the Mitsubishi Electric Group called “Environmental Vision 2021.” Its target year of 2021 coincided with the 100th anniversary of the company’s founding. Based on this vision, we have worked toward the realization of a sustainable society over a wide range of business activities.

The Vision came to a close at the end of fiscal 2021 with the successful achievement of all its goals. For example, CO₂ emissions during production and during product usage were reduced by 56%*¹ and 37%*¹, respectively. Additionally, resource inputs were reduced, and thorough waste reduction efforts aimed at achieving zero emission were disseminated throughout the Group.

From fiscal 2022, we will strive to strengthen our environmental efforts under “Environmental Sustainability Vision 2050,” our new long-term vision.

*¹ Base year for reduction in CO₂ emissions during production: Mitsubishi Electric Corporation, fiscal 1991; affiliates in Japan, fiscal 2001; and overseas affiliates, fiscal 2006.
Base year for reduction in CO₂ emissions from product usage: fiscal 2001.

Environmental Vision 2021



*² Mitsubishi Electric Corporation: Base year fiscal 1991;
Affiliated companies in Japan: Base year fiscal 2001;
Affiliated companies outside Japan: Base year fiscal 2006

Creating a Low-Carbon Society

To help create a low-carbon society, we will:

- Work to create and popularize innovative energy-saving products to achieve the goal of reducing CO₂ emissions from product usage by 30% compared to fiscal 2001
- Strive to reduce CO₂ emissions from product production by 30% (520,000 tons) across the entire Mitsubishi Electric Group as a prerequisite for sustainable growth
- Reduce CO₂ emissions from power generation and contribute to the creation of a low-carbon society by supplying the power industry with products and systems that do not emit CO₂, including solar power and nuclear power systems

Creating a Recycling-Based Society

To help create a recycling-based society, we will:

- Develop sustainable resource cycles by reducing waste output, reusing resources and recycling resources to give them new life
- Strive for zero waste output from production processes

Respecting Biodiversity: Ensuring Harmony with Nature and Fostering Environmental Awareness

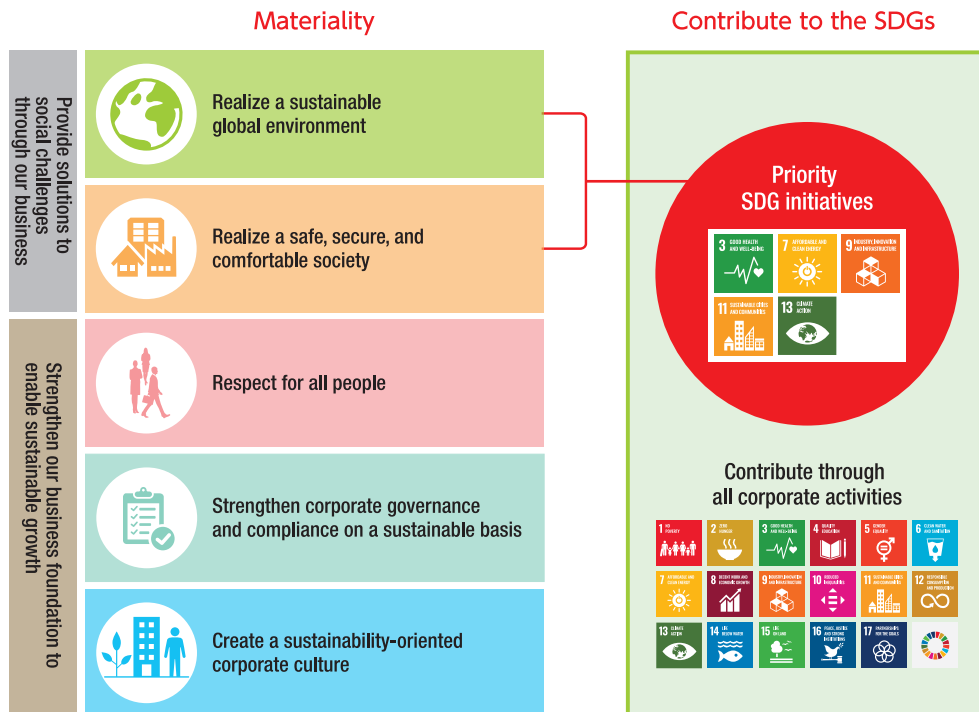
To help ensure harmony with nature and cultivate greater environmental awareness, we will:

- Strive to respect biodiversity in our business activities
- Teach employees the importance of maintaining harmony with nature by providing opportunities for nature observation and direct participation in conservation activities to inculcate autonomous actions for the sake of the environment
- Engage in nature conservation activities to restore damaged woodland environments

Strategy for Climate Change

The Mitsubishi Electric Group's Materiality

With the vision of realizing a vibrant and sustainable society, the Mitsubishi Electric Group has established its "materiality" (significant issues) by grouping sustainability initiatives that have particular priority from the two perspectives of "providing solutions to social challenges through our business" and "strengthening our business foundation to enable our sustainable growth." Based on this, we have re-established five new issues and have begun addressing them from fiscal 2022. One of these is "the realization of a sustainable global environment." We have made our response to climate change a priority in this area and our aim is to achieve net-zero greenhouse gas emission throughout the value chain in 2050.

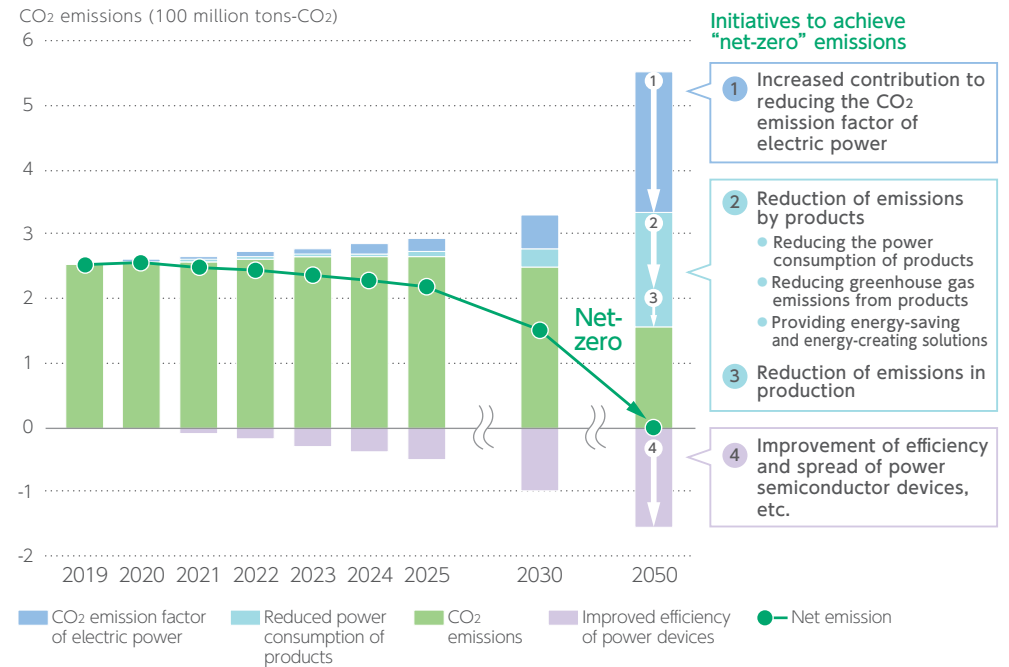


The Mitsubishi Electric Group's Materiality / Contribute to the SDGs

Initiatives to Realize a Decarbonized Society

The Mitsubishi Electric Group is aiming to achieve net-zero greenhouse gas emissions throughout the entire value chain by 2050. Toward this end, we are striving to reduce greenhouse gas emissions with a focus on the following four initiatives: (1) increased contribution to reducing the CO₂ emission factor of electric power, (2) reduction of emissions by products, (3) reduction of emissions in production, and (4) improvement of efficiency and spread of power semiconductor devices, etc.

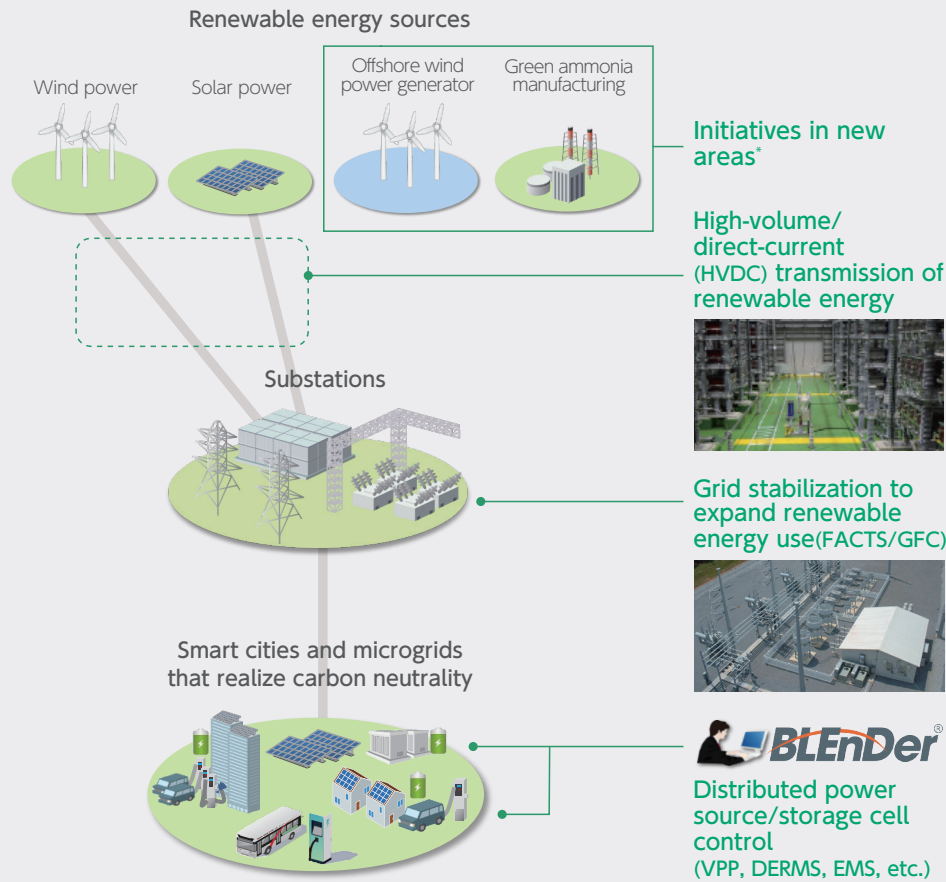
Greenhouse Gas Emissions throughout the Value Chain



Examples of Initiatives to Realize a Decarbonized Society

Example 1

Increased contribution to reducing the CO₂ emission factor of electric power - Contributing to a wider introduction of renewable energy -



DERMS: Distributed Energy Resource Management System EMS: Energy Management System
 FACTS: Flexible AC Transmission Systems GFC: Grid Forming Control
 GWP: Global Warming Potential HVDC: High Voltage Direct Current SiC: Silicon Carbide VPP: Virtual Power Plant

* Commercialization yet to be decided

Example 2

Reduction of emissions by products

Reduction in power consumption of new products

Improvement of more than 1% from previous models

Provision of energy-saving & energy-creating solutions



Air conditioning systems: Accelerating the switch to low-GWP coolants



Electric products (motors/inverters)



e-F@ctory solutions



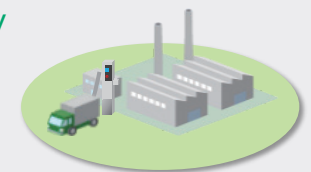
ZEB (net Zero Energy Building)

Example 3

Reduction of emissions in production

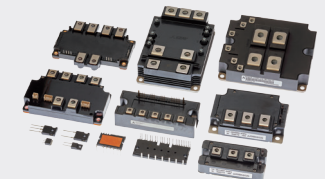
Target of investing 0.15% of our revenue in decarbonization

Increasing the utilization rate of renewable energy



Example 4

Improvement of efficiency and spread of power semiconductor devices, etc.



SiC power devices

Financial Information Based on Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

The Mitsubishi Electric Group has expressed its support for the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures). In line with these recommendations, the Group discloses relevant information on climate change.

Strategy

The Mitsubishi Electric Group regards sustainability as the foundation of corporate management and makes sustainability-oriented efforts in all activities, in line with its “Purpose*1,” “Our Values*2,” and “Commitment*3.”

Our management strategy is to “provide integrated solutions to address diversifying social challenges in the four fields of Life, Industry, Infrastructure and Mobility, uniting all the capabilities in and outside the Group. For this purpose, we will enhance the business foundation we have fostered over the past 100 years and further transform our business models.” The Mitsubishi Electric Group will pursue value creation for addressing social challenges, and contribute to achieving the 17 worldwide goals of the SDGs through all corporate activities. Furthermore, Environmental Sustainability Vision 2050 was established in 2019, and positions environmental contribution an even greater corporate priority and stipulates its initiatives in solving environmental issues.

The Group formulates a three-year Environmental Plan as an integral goal based on the corporate strategy and environmental vision for initiatives toward environmental issues including climate change. The plan sets out quantitative targets to be achieved, and the Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs, who is responsible for environmental management, formulates the plan and shares it with each group organization. Each organization implements its own Environmental Action Plan (annual plan) based on the Environmental Plan.

The results of business execution are reviewed by the Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs, and each organization reviews the Environmental Plan (three-year plan) and its Environmental Action Plan (annual plan) as necessary.



*1 We, the Mitsubishi Electric Group, will contribute to the realization of a vibrant and sustainable society through continuous technological innovation and ceaseless creativity.

*2 Trust: We develop relationships based on strong mutual trust with all stakeholders including society, customers, shareholders, suppliers, and employees working together.
 Quality: We ensure the satisfaction of society and customers by providing products and services of the best quality.
 Technology: We provide society with new value by enhancing technology and onsite capabilities.
 Ethics and Compliance: We act with high ethical standards and comply with laws and social norms.
 Humanity: We prioritize health and safety, promote diversity and respect personalities and human rights.
 Environment: We strive to protect and improve the global environment, doing so in harmony with nature.
 Society: We contribute to the development of a better society as a corporate citizen.

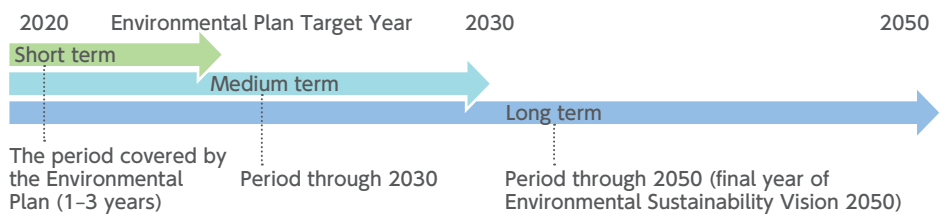
*3 “Changes for the Better” (the Mitsubishi Electric Group’s attitude to “always strive to achieve something better”)

*4 Science-Based Targets: Targets to reduce greenhouse gas (GHG) emissions in line with the latest climate science necessary to meet the goals of the Paris Agreement.

Overview of Risk and Opportunity Assessment through Scenario Analysis

Through scenario analysis, we assess the corporate activities of the Group in terms of risks and opportunities.

The assessment is made based on two scenarios: a scenario to keep the increase in the global average temperature to below 2°C above pre-industrial levels (2°C scenario*1) and a scenario in case the temperature rises nearly 4°C as a result of continuing the conventional global warming countermeasures (4°C scenario*2). The period covered by the scenario analysis is up to 2050, and the periods are classified as shown below.



*1 Applied the IEA 450 scenario, etc. *2 Applied the IPCC RCP 8.5 scenario, etc.

Climate-Related Risks and Responses by the Mitsubishi Electric Group

Climate-related risks can be broadly divided into risks associated with the transition to a decarbonized society (hereinafter referred to as "transition risks") and risks associated with the physical impacts of global warming (hereinafter referred to as "physical risks"). These risks can result in increased expenses (for production, internal administration, financing, etc.), decreased revenues, and lower stock prices.

If the 2°C scenario progresses, social demand for reducing greenhouse gas emissions is expected to grow, raw material costs are expected to rise due to changes in the energy demand and supply balance, and the amount of generated power by renewable energy sources is expected to increase, in the transition to a decarbonized society. As a result of efforts to realize such a society, the likelihood of transition risks arising from the tightening of laws and regulations on greenhouse gas emissions and an increase in the burden of technological development will be relatively high (compared to physical risks).

If the 4°C scenario progresses, there is expected to be a significant increase in the frequency and severity of heavy rains and floods and a chronic rise in temperature. Physical risks such as the suspension of operations and disruption of the supply chain due to disaster will be relatively high (compared to transition risks).

In response to these risks, the Mitsubishi Electric Group implements initiatives as shown in following table.

Examples of Climate-Related Risks and Responses by the Mitsubishi Electric Group

Risks	Examples of the Group's Initiatives
Transition Risks	
Policy and Legal Risks (Short to Long-Term) <ul style="list-style-type: none"> • Increase in carbon pricing • Strengthened obligation of emission reports • Orders and regulations for existing products and services by relevant authorities • Litigation 	<ul style="list-style-type: none"> • Reduction of GHG*3 emissions through promotion of environmental plans and setting and taking initiative on science based targets, • Promotion of environmentally conscious design (global warming, resource conservation, recyclability, hazardous substances, packaging) • Capital investment related to environmental activities, including energy saving and global warming countermeasures • Implementation of supply chain management (formulation and implementation of green procurement standards) • Reporting of Scope 1, 2 and 3 emissions and implementation of third-party certification • Acquisition and maintenance of ISO 14001 certification • Confirmation of legal compliance through environmental audits • Disclosure of initiatives related to climate change and other environmental issues
Technology Risks (Medium to Long-Term) <ul style="list-style-type: none"> • Replacement of existing products and services with low-emission alternatives • Failed investment in new technologies • Cost of transition to low-emission technologies 	<ul style="list-style-type: none"> • Development of new technologies through R&D investment • Implementation of intellectual property activities • Mobile capital investment mainly in growth driving businesses • Capital investment related to environmental activities, including energy saving and global warming countermeasures
Market Risks (Medium to Long-Term) <ul style="list-style-type: none"> • Changes in customer behavior • Uncertainty in market signals • Rise in raw material costs 	<ul style="list-style-type: none"> • Promotion of environmentally conscious design • Capital investment related to environmental activities, including energy saving and global warming countermeasures • Market research and feedback on product development
Reputation Risks (Medium to Long-Term) <ul style="list-style-type: none"> • Changes in consumer preferences • Criticisms of the industrial sector • Increased concerns among stakeholders, or negative feedback from them 	<ul style="list-style-type: none"> • Reduction of GHG emissions through promotion of environmental plans and setting and taking initiative on science based targets, Capital investment related to environmental activities, including energy saving and global warming countermeasures • Promotion of environmentally conscious design • Response to environmental risk management • Implementation of natural environment conservation activities, including the protection of local biodiversity • Disclosure of initiatives related to climate change and other environmental issues
Physical Risks	
Acute Risks (Short to Long-Term) Increased severity of extreme weather such as heavy rains and floods	<ul style="list-style-type: none"> • Formulation and periodic review of BCPs*4 • Implementation of supply chain management (formulation and implementation of green procurement standards, decentralization of production sites by purchasing from multiple companies, etc.)
Chronic Risks (Medium to Long-Term) Changes in precipitation patterns and extreme variations in weather patterns	<ul style="list-style-type: none"> • A certain amount of investment every year in environmental activities, including initiatives against climate change • Reduction of GHG emissions through promotion of environmental plans and setting and taking initiative on science based targets

*3 Greenhouse gas *4 Business continuity plan

For example, even if laws and regulations strengthen the curtailment of greenhouse gases under the 2°C scenario, the Group can mitigate the impacts of such a regulatory move, as it is already working to reduce its emissions through promotion of an Environmental Plan and setting and taking initiative on science based targets. Similarly, the impact of rising raw material costs can be mitigated by further promoting environmentally conscious design that is already being implemented toward addressing global warming, resources conservation, and improved recyclability. We also invest in facilities for environmental activities, including energy saving and other measures to combat global warming, and in the research and development of new technologies in a well-balanced manner from the short, medium, and long term perspectives.

Against physical risks such as flooding under the 4°C scenario, we have formulated a BCP (business continuity plan) and review it once a year while moving ahead with the decentralization of production sites. We are also taking steps to prevent production problems in the supply chain, such as by purchasing from multiple companies and having our suppliers operate multiple production plants.

Climate-Related Opportunities and Initiatives by the Mitsubishi Electric Group

As the 2°C or 4°C scenario progresses, social issues arising from climate change are expected to become more apparent.

For example, if the 2°C scenario progresses, an increase in power generation by renewable energy is projected. The Mitsubishi Electric Group is capable of contributing to addressing needs for effective use of electricity and system stabilization that stem from such expansion of renewable energy and the decentralization of power sources, by providing large energy storage systems, smart medium- and low-voltage direct current distribution network systems, and distributed power source operation systems / virtual power plant (VPP) systems.

If the 4°C scenario progresses, frequent heavy rain and floods are expected. Using observation satellites, the Group is able to enhance the monitoring of meteorological phenomena and the global environment, assess disaster situations, and contribute to disaster prevention.

As shown in the following table, the Mitsubishi Electric Group has a wide range of businesses. Our strength is our ability to provide a wide range of products, services, and solutions that contribute to solving social issues arising from climate change. Through our solutions to these social issues, we believe we have the opportunity for short to long term sustainable growth.

Please refer to the section on “Initiatives that Contribute to Addressing Social Issues” in the “Mitsubishi Electric Group CSR Report” for details on the activities of each business.

Examples of Climate-Related Opportunities and Initiatives by the Mitsubishi Electric Group

Social Issues (Opportunities)	Examples of the Group's Initiatives
Resource Efficiency	
<ul style="list-style-type: none"> • Use of more efficient modes of transport (modal shift) • Use of more efficient and resource-saving production and distribution processes • Promotion of recycling • Relocation to a more efficient building • Reduction in water usage and consumption 	<ul style="list-style-type: none"> • Development of products suitable for resource conservation, such as thinner materials and smaller tubes • Promotion of plastic recycling • Energy conservation and reduction of operation costs for buildings as a whole through ZEB (net Zero Energy Building), etc. • Development of coordinated control technology for in-building mobility and facilities • Provision of systems for water distribution management, water storage and discharge through dam management, and water intake management for agricultural water • Promotion of reclaimed water use by ozonizers • Strengthening of products and solutions that support e-F@ctory*1 • Promotion of a modal shift through the transportation systems business • Development of products and technologies that contribute to autonomous driving • Localization of production and sales bases
Energy Source	
<ul style="list-style-type: none"> • Use of lower-emission energy sources • Use of new technologies • Shift toward decentralized energy generation 	<ul style="list-style-type: none"> • Effective use of electricity and response to needs for system stabilization accompanying the expansion of renewable energy and decentralization of power sources <ul style="list-style-type: none"> - Large energy storage systems - Smart medium voltage DC distribution network system D-SMiree*2 - Distributed power supply system/VPP system
Products and Services	
<ul style="list-style-type: none"> • Development and/or expansion of low emission goods and services • Development of new products or services through R&D and innovation • Ability to diversify business activities • Shift in consumer preferences 	<ul style="list-style-type: none"> • Development of energy-saving products optimized for local climate conditions and needs • Development of innovative new products such as the Misola,*3 a lighting fixture that creates the illusion of a deep blue sky and natural light in indoor spaces. • Improvement of the energy efficiency of railway vehicles and effective utilization of regenerative electric power from braking • Demonstration of ZEB-related technologies, including the construction of demonstration facilities • Development of the EcoMBR*4 filtration membrane cleaning system for water treatment • Provision of smart meters • Development and supply of energy conservation equipment that facilitates the measurement of energy consumption and the collection and analysis of energy consumption data • Global supply of high-efficiency equipment, including electric power train systems • Development and supply of low-loss SiC devices • Establishment of the Business Innovation Group • Localization of production and sales sites • Balanced promotion of short-, medium- and long-term research and development
Resilience	
<ul style="list-style-type: none"> • Participation in renewable energy programs and adoption of energy efficiency measures • Resource substitutes/diversification 	<ul style="list-style-type: none"> • Effective use of electricity and response to needs for system stabilization accompanying the expansion of renewable energy and decentralization of power sources • Contribution to preventing global warming by using observation satellites, strengthening the monitoring of meteorological phenomena and the global environment, understanding of disaster situations, and promoting disaster prevention • Meteorological radar system • Field Edge® image-based water level measurement device • Provision of BCP solutions, such as data centers, teleworking, and video conferencing services

*1 <https://www.MitsubishiElectric.com/fa/sols/index.html>

*2 https://www.MitsubishiElectric.com/en/sustainability/csr/management/social_contributions/energy/index.html

*3 <https://www.MitsubishiElectric.co.jp/ldg/ja/lighting/products/fixture/misola/index.html> (in Japanese)

*4 <https://www.MitsubishiElectric.com/en/about/rd/research/highlights/energy/mbr.html>

As a result of this assessment of climate-related risks and opportunities and our initiatives toward them, the Mitsubishi Electric Group can be said to have resilience against such risks under both the 2°C and the 4°C scenarios and the opportunity for sustainable growth through the solving of social issues arising from climate change.*

* This conclusion is based on the scenario, and the future outlook may differ.

Management System Governance System

As a company with functions such as a Nomination Committee, etc., we aim to achieve sustainable growth by improving management agility and transparency and strengthening management oversight functions. Our basic policy is to build and improve a system that can accurately meet the expectations of stakeholders, including society, customers, shareholders, and employees, and further enhance our corporate value.

A salient characteristic of Mitsubishi Electric’s management structure is that the roles of the Chairman of the Board, who heads the supervisory function, and the President & CEO, who is the head of all executive officers, are clearly separated. Additionally, neither is included among the members of the Nomination and Compensation Committee. Our company’s corporate governance is made more effective by clearly separating the supervisory and executive functions.

The Board of Directors is comprised of twelve members, including five outside directors (one is a woman). The members execute their duties based on the objectives and authority specified by the Companies Act. At the same time, the executive officers are delegated the authority to make decisions on all business operations, except for matters listed in the items of Article 416, Paragraphs 1 and 4 of the Companies Act, to provide advice to and supervise Mitsubishi Electric’s management from an objective perspective.

The executive officers, including the officer in charge of production systems, who are responsible for promoting environmental management, are delegated by the Board of Directors to make decisions and execute business operations within the scope of their responsibilities in accordance with the objective and authority stipulated in the Companies Act. The Executive Officers’ Meeting, comprised of all executive officers, deliberates and makes decisions on important matters.

The compensation scheme for executive officers places importance on the realization of management policies and incentives to improve performance, and pays out a fixed amount of compensation and retirement benefits upon their resignation, in addition to a performance-linked compensation. The basic policy specifies that the compensation is to “increase awareness of contributing to improving business performance over the medium to long-term and increasing corporate value.”

Identifying, Evaluating, and Managing Risks and Opportunities and Incorporating Them into Business Activities

The Environmental Management System (EMS) is integrally operated by the Mitsubishi Electric Group as a whole, with all organizations within the Group (business groups, head office management divisions, Corporate Human Resources Division, factories, and affiliated companies) working to achieve the Group’s three-year environmental plan as a common goal. Each

organization identifies and assesses risks and opportunities related to its environment, including climate-related risks, and reflects them in its own EMP (Environmental Management Plan).

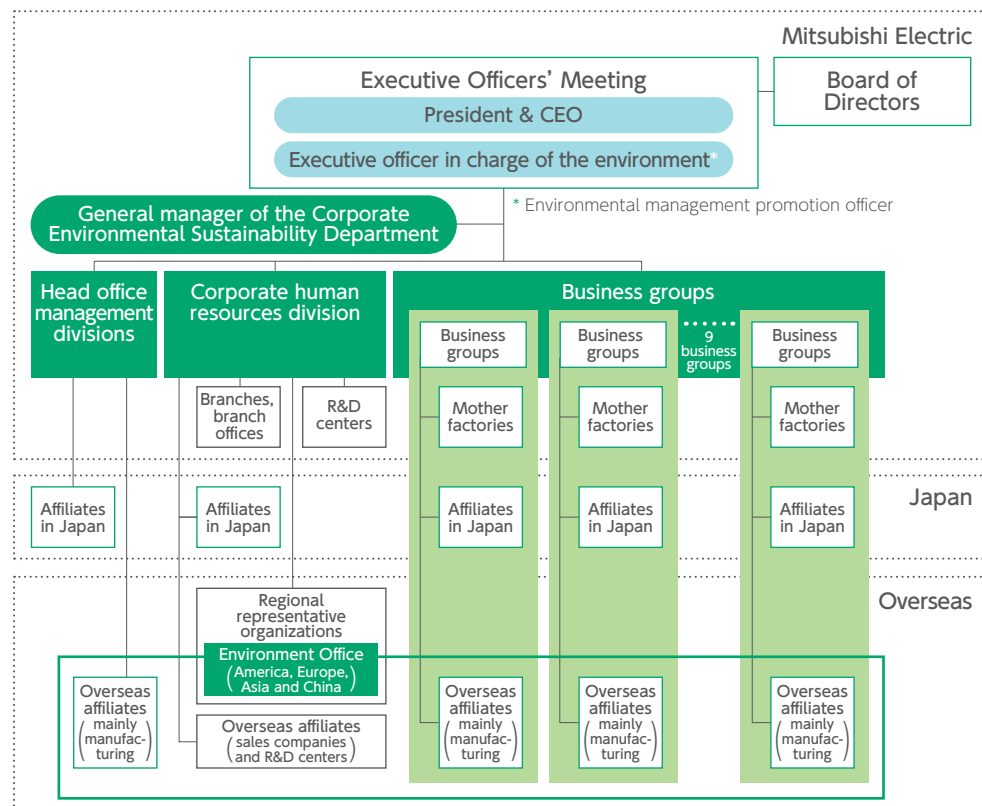
Business groups, head office management divisions, and the Corporate Human Resources Division direct and manage the activities of their organizations, their branch offices, factories, and affiliated companies based on the EMP.

Each organization has an Environmental Promotion Manager who manages and supervises the EMP, its performance, and environmental performance within the scope of his/her management and supervision.

The Environment Office, as a regional organization in the regional representative organization for the Americas, Europe, Asia, and China, supports the development of Group-wide measures and the activities of all affiliated companies in the region under its management.

The progress of the EMP in each division is reported to the Corporate Environmental Sustainability Department, which identifies and assesses company-wide risks and opportunities based on the reports and reviews the Environmental Plan and EMPs as necessary.

Environmental Governance and Risk Management System



Climate Change Indicators and Goals

The Mitsubishi Electric Group's Environmental Plan

The Mitsubishi Electric Group has formulated an Environmental Plan every three years since 1993, setting specific action targets. We are presently pursuing various activities in line with the current plan, Environmental Plan 2023 (fiscal 2022 to 2024), which sets forth indexes and targets in four areas based on the action guidelines of Environmental Vision 2050: “environmental contribution through products and services,” “reducing the environmental impact of business activities,” “pursuing business innovations,” and “publicizing and sharing new values and lifestyles.”

→For more information, see “Environmental Plan 2023” on pages 16-17.

Calculating and Identifying Greenhouse Gas Emissions along the Value Chain

The Mitsubishi Electric Group calculates and tracks greenhouse gas emissions (Scope 1, Scope 2 and Scope 3) in its value chain. For calculation and assessment, we refer to the GHG Protocol and the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain published by Japan’s Ministry of the Environment.

→For more information, see “Reducing Greenhouse Gases Emitted in the Value Chain” on page 36.

Science Based Targets

The Mitsubishi Electric Group has set the following greenhouse gas reduction targets and has been approved by the Science Based Targets initiative in January 2020.

- Scope 1 and Scope 2: Mitsubishi Electric commits to reduce total Scopes 1 and 2 GHG emissions by 18% by 2030, compared to the base year of fiscal 2017.
- Scope 3,^{*1,*2}: Mitsubishi Electric commits to reduce total Scope 3 GHG emissions by 15% by 2030, compared to the base year of fiscal 2019.

^{*1} The scope of third-party certification in Scope 3 includes Category 1 (purchased goods and services), Category 6 (business travel), Category 7 (employee commuting), and Category 11 (use of sold products).

^{*2} Scope 3 covers Category 11 (use of sold products).

We will continue to disclose our progress of the targets.

Implementation of Third-Party Certification

The Mitsubishi Electric Group has set targets for its greenhouse gas emissions (Scopes 1, 2 and 3) and amount of water used and discharged. They have been certified by a third party in compliance with ISO 14064-3 to ensure reliability of the data.

→For details, please refer to the Verification Statement.

https://www.MitsubishiElectric.co.jp/corporate/environment/disclosure/tpv/pdf/tpv_2021_e.pdf

The Structure of Our Environmental Management System

Scope of Environmental Management

The Mitsubishi Electric Group operates an ISO 14001:2015 compliant environmental management system that covers Mitsubishi Electric and its major affiliates.

Major Affiliates

- Consolidated companies: Companies with 50% or more of (voting) shares owned by Mitsubishi Electric and directly managed by Mitsubishi Electric.
- Non-consolidated companies: Companies judged to require integrated environmental management by Mitsubishi Electric.

Environmental Plan and Environmental Implementation Plan

The Mitsubishi Electric Group formulates an environmental plan every three years, comprised of measures and targets for realizing the Environmental Sustainability Vision. To achieve the targets of this environmental plan, each management organization formulates and acts on a yearly environmental implementation plan.



(1) Formulation of a Fiscal Year Plan–(2) Formulation of an Environmental Implementation Plan

Based on environmental plans, objectives and action plans are determined for that fiscal year.

(3) Company-Wide Environmental Managers' Meeting

A meeting is held that is attended by all people who are responsible for promoting environmental practices. Information such as focus issues and policies is shared and confirmed.

(4) Confirmation of Progress and Achievements

Every six months, the Corporate Environmental Sustainability Department compiles environmental performance data and other relevant information, and reports them to the Executive Officer in charge of Information Security and Total Productivity Management & Environmental Programs, who is responsible for environmental management. The Executive Officer then conducts a review and modifies environmental plans as necessary (e.g., when any significant change occurs in the business environment related to the Group).

(5) Reporting of Annual Environmental Results

The Corporate Environmental Sustainability Department compiles environmental performance data and other relevant information for the fiscal year to report to the Executive Officer in charge of Information Security and Total Productivity Management & Environmental Programs.

(6) Management Review

The Executive Officer in charge of Information Security and Total Productivity Management & Environmental Programs carries out the review of activity results and reconsiders environmental plans and/or the environmental implementation plan for the next fiscal year if necessary.

Our activity level is enhanced through the “formulation,” “implementation,” “verification of results,” and “review” of the plans throughout the fiscal year. In addition to this, audits and inspections on an “as needed” basis ensure that appropriate activities are carried out.

Sharing Information with Environmental Managers in Each Organization

Within the Mitsubishi Electric Group, in addition to the technology committees for different issues and meetings held by the people in charge of each organization, general meetings are held and attended by all people responsible for promoting the environmental practices for each division in Japan and overseas. The aims of such meetings include confirming key issues and unifying the approaches to these that the various divisions take, as well as sharing useful information such as “favorable case examples” of each other’s practices and “matters to watch out for” on a regular and continuous basis. Such meetings are useful for improving overall management levels.

The “Company-wide Environmental Managers’ Meeting” and the “Overseas Regional Environmental Meeting” are representative of this practice. The former brings together all environmental managers from across Japan. The latter is held in our four overseas regions (the Americas, Europe, China and the rest of Asia).

In fiscal 2021, these meetings were all held online to prevent the spread of COVID-19.

Training of Environmental Personnel

Developing Personnel to Proactively Engage in Environmental Activities

The Mitsubishi Electric Group recognizes “nurturing human resources” as one of its key activities in accordance with the action guideline to “challenge to develop business innovations for future generations,” as set forth in the long-term environmental management vision, “Environmental Sustainability Vision 2050.”

We strive to foster a corporate culture in which each Mitsubishi Electric Group employee takes the initiative to create a new lifestyle in harmony with nature as an ordinary citizen. We also develop human resources who possess a high degree of expertise and who accept diverse values and proactively tackle environmental issues, on a continuous basis. Furthermore, in order to provide effective training, we employ various educational curricula in accordance with each employee’s role and expertise.

Environmental Education System

Target	Lecture Name
Managerial Staff	<ul style="list-style-type: none"> •Environmental Promotion Chief Administrator Training •Environmental Section Manager Training •New Environmental Section Manager Training
Employees Involved in Environmental Business	<ul style="list-style-type: none"> •MELCO Seminar Environmental Courses <ul style="list-style-type: none"> - Waste Management - Design for the Environment - Energy Saving Law - Biodiversity - Chemical Substances Management •Key Environmental Personnel Liaison Meetings •Environmental Basic Guidance •Training Internal Auditors
General Employees	<ul style="list-style-type: none"> •Environmental Course for Employees Dispatched Overseas •e-Learning for All Employees, Mitsubishi Electric Group Environmental Management •Environmental Training Course by Age Group •Common Basic Training for New Employees •Activities to Foster Environmental Awareness <ul style="list-style-type: none"> - Preserving Biodiversity at Business Sites - Satoyama Woodland Preservation Project - Mitsubishi Electric Outdoor Classroom •Outdoor Classroom Leader Development/Regional Block Leader Meetings

Preventing Environmental Incidents

Preventing Environmental Incidents through Information-Sharing and Equipment Inspections

Both within Japan and overseas, the Mitsubishi Electric Group strives to prevent environmental incidents, such as the leakage of substances that may result in water or soil pollution or have a negative impact upon the environment.

To achieve this, Mitsubishi Electric ensures that its entire workforce is fully familiar with the relevant laws and regulations, revises company rules to reflect any updates to such laws and regulations, and ensures these updates are made known throughout the Group. In the case of a problem (e.g., minor oversight) occurring, Mitsubishi Electric shares the cause and countermeasures throughout the entire Group to prevent it from reoccurring. Aiming to increase the awareness of environmental risk management, the Mitsubishi Electric Group’s offices and factories across Japan take measures such as watching internal training videos that introduce examples of problems and the establishment and renewal of important laws, thereby firmly instilling environmental management issues across a wider range of occupational levels. In addition, periodic facilities inspections are carried out at all Group bases, the results of which are compiled into necessary measures from time to time and utilized.

Environmental audits are also conducted at major affiliated companies overseas in an effort to uncover and prevent environmental risks.

Responding to Soil and Groundwater Pollution

As stated in our internal rules, the Mitsubishi Electric Group’s business sites (works, laboratories, etc.) conduct environmental assessments such as when there is a change in land characteristics. These assessments are based on a survey method that complies with relevant laws and regulations, and the necessary countermeasures or solutions are implemented in accordance with the state of pollution.

In fiscal 2021, we assessed survey results and countermeasures regarding the condition of soil and groundwater due to land utilization for a total of seven cases and have confirmed that all cases were handled appropriately.

Regarding areas that were recognized as having groundwater or soil pollution problems in the past, we implemented purification measures using method compliant with laws and regulations, and continue to regularly report the results of our monitoring to relevant government organizations.

Appropriate Storage and Processing of PCB Waste and Devices Containing PCBs

Mitsubishi Electric conducts inspections at all bases that store PCB waste and/or handle devices containing PCBs at least once a year to confirm the status of PCB storage and usage.

With respect to high-concentration PCB waste, all relevant procedures were completed, including entering into a waste disposal contract with the Japan Environmental Storage & Safety Corporation (JESCO), a company that specializes in interim storage and environmental safety. In fiscal 2021, we processed 172 devices (1,397kg). Our affiliates in Japan also processed 714 devices (670kg).

Customers can confirm whether or not an electrical device manufactured by a Mitsubishi Electric Group company contains PCB by referring to a list available on the corporate website.

ISO Certification

Mitsubishi Electric has obtained company-wide multi-site (collective) ISO 14001:2015 certification. This certification structure was chosen as part of our attempt to strengthen compliance by the company as a whole and to further strengthen our contribution to the environment through business operations based on our environmental plans.

Please refer to “ISO 14001 Certificate of Registration/Appendix” for details of sites included in the multi-site certification.

ISO 14001 Certificate of Registration/Appendix
https://www.MitsubishiElectric.co.jp/corporate/environment/disclosure/iso/certificate_en/index.html

Environmental Audits

The Mitsubishi Electric Group combines the multiple types of environmental auditing shown below in order to carry out checks from various perspectives. These audits are performed at each business site to confirm their compliance with laws and regulations, the operational status of the environmental management system, and the progress of environmental action plans.

Overview of the Four Types of Environmental Audits

	Internal auditing at business sites	Mutual auditing between business sites	Auditing of affiliated companies	Auditing by the audit division
Implementing body	All Mitsubishi Electric business sites (head office, branches, works and R&D centers) and affiliated companies	All Mitsubishi Electric business sites (head office, branches, works and R&D centers)	Mitsubishi Electric (head office and works)	Mitsubishi Electric (head office audit division)
Subject of audits	Other organizations within the same business site	Other business sites	Affiliated companies	Mitsubishi Electric and affiliated companies
Frequency of audits	Once a year	Once a year	Once every two to three years	Once every three years

Environmental Plan

Overview of the 9th Environmental Plan

At the Mitsubishi Electric Group, we formulate an Environmental Plan consisting of initiatives and targets every three years, with the purpose of achieving our Environmental Vision. The 9th Environmental Plan, a three-year plan from fiscal 2019, ended in fiscal 2021.

The table below shows the targets and results of each item.

Target of 9th Environmental Plan (FY 2021)	Result		
	FY 2019	FY 2020	FY 2021

■ Initiatives through Products and Services

Reducing Resource Inputs	Average reduction rate from 64 product groups (compared to FY 2001) 40% or more	42%	42%	43%
Reducing CO ₂ Emissions from Product Usage by Improving Product Performance	Average reduction rate (compared to FY 2001) 35% or more*1	36%	37%	36%
Increasing Contribution to Reducing CO ₂ Emissions from Product Usage	Contribute to reducing emissions from at least 127 product groups: 70 million tons or more	77 million tons	76 million tons	74 million tons

■ Initiatives at Business Sites

Reducing CO ₂ from Production	Annual emission of greenhouse gases (CO ₂ conversion) 1.47 million tons or less	1.29 million tons	1.24 million tons	1.16 million tons
Effective Utilization of Resources	• Mitsubishi Electric Group companies in Japan Final disposal rate: below 0.1%	0.01%	0.01%	0.02%
	• Affiliates (Overseas) Final disposal rate: below 0.5%	0.5%	0.4%	0.2%
Using Water Effectively	Reduction in water usage per unit of sales: 10% or more (improvement of 1% per annum compared to FY 2011)*2	23%	21%	20%
Preserving Biodiversity at Business Sites	Number of business sites where activities are promoted: All business sites of Mitsubishi Electric	All 24 business sites	All 24 business sites	All 20 business sites
Continuous Holding of the "Mitsubishi Electric Outdoor Classroom" and "Satoyama" Woodland Preservation Project	Total participants since FY 2008: 51,000 people or more*3	43,738 people	47,808 people	48,872 people

*1 99 product groups in fiscal 2019, 98 product groups in fiscal 2020 and 2021.

*2 The targets for fiscal 2019 and 2020 were 8% or more and 9% or more, respectively.

*3 The targets for fiscal 2019 and 2020 were 43,000 and 47,000 people, respectively.

Steady progress has been made in all initiatives throughout fiscal 2019 and 2020. However, during fiscal 2021, we were unable to hold the Mitsubishi Electric Outdoor Classroom and the Satoyama Woodland Preservation Project as initially scheduled, due to the COVID-19 pandemic. As a result, the target relating to the continuation of these two programs (i.e., the cumulative total number of participants since fiscal 2008) remained unachieved.

From fiscal 2022, we will continue to work together as one to achieve all of the targets under the new three-year plan, Environmental Plan 2023.

→For more information, see "Environmental Plan 2023" on page 16.

Environmental Plan 2023

Formulation Background and Concept

Environmental Plan 2023 is the first environmental plan formulated based on Environmental Sustainability Vision 2050. In order to achieve “decarbonization” and a “circular economy,” we will promote innovation in development and accelerate the reduction of our products’ environmental impact through their entire lifecycles. Based on this plan, we will also ensure strict management of targets in relation to renewable energy adoption rates and effective usage rates of plastic waste at our business sites.

Products

Environmental activities starting from product development

Starting from fiscal 2022, we will assess the extent of reduction of the environmental impact of newly developed products (or improvement rates from previous models) over our entire product range, using indices specified for each product.

We will centrally manage data such as the consumption of materials and energy during development, the weight of packaging, and the quantities of shipped products, and apply the PDCA cycle for further improvement.



Services

Expansion of environmental solutions and services

We will make energy-saving proposals for systems using integrated solutions, strive to extend the service life of equipment through maintenance, and promote the modernization of elevators and escalators. We will also enhance our resource recycling solutions, including the reuse of air-conditioning piping, and further expand the “closed-loop recycling” of plastics.



Business Activities

Maintaining/improving measures to reduce the environmental impact of business activities

When constructing new buildings and introducing energy-saving equipment, we will ensure strict compliance with all relevant energy-efficiency guidelines. We will also continue to manage the reduction of energy usage by establishing targets to improve the operations of our facilities. Furthermore, we will strive to introduce renewable energy that is suited to each area, and strengthen our governance of waste.

Activities and Key Performance Indicators

Classification	Activity	KPI	Target set in Environmental Plan 2023
Environmental contribution through products and services	Expanding our contribution to CO ₂ emission reduction with new products	Improvement rate of new products over previous models	1% or more in fiscal 2024
	Improving the usage rate of recycled plastics	Usage rate of recycled plastics (procurement volume of molding/packaging materials)	10% or more in fiscal 2024
Reduction of the environmental impact of our business activities	Reducing CO ₂ from production	CO ₂ emission	Reduction of 9% or more compared to fiscal 2017 (SBT compliant)
		CO ₂ emission per unit of sales	Reduction of 6% or more compared to fiscal 2020
	Improving the effective usage rate of plastic waste	Increase in usage rate of renewable energy sources	2% or more in fiscal 2024
		Effective usage rate of plastic waste (in Japan)	90% or more
Using water effectively	Water consumption per unit of sales in high-risk sites	Reduction of 4% or more compared to fiscal 2020	
Publicizing and sharing new values and lifestyles	Promoting the “Mitsubishi Electric Outdoor Classroom” and “Satoyama” Woodland Preservation Project”	Number of areas where activities are held	39

We have set indexes and targets in order to measure the progress of product improvement initiatives undertaken by the Mitsubishi Electric Group as a whole and by our business sites. With respect to items that may require creative efforts by each business site, we will encourage participation from all business sites and employees, without setting across-the-board targets.

Measures Regarding “Environmental Contribution through Products and Services” and “Pursuing Business Innovations”

Making Our Environmental Contribution Visible and Setting Targets

We will make our environmental contribution visible and set targets by following the below procedure. In doing so, we aim to instill in our employees an awareness of environmentally friendly design, particularly among our designers, and to strengthen this awareness.

- (1) Define operating conditions for assessment and evaluation items* for each product group (including systems and solutions).
- (2) Assess the environmental performance of products using an electronic system. This will facilitate the collection and analysis of data.
- (3) Set targets for each product group and assess their achievement at the development and design stages (during design reviews).

Further improvements will be made based on the results of the above.

* Global warming countermeasures and resource-saving efforts are mandatory evaluation items. Other than these, appropriate items are selected for each product group from recyclability, volume of chemical substances used, and weight of packaging materials used.

Example of Environmental Performance Evaluation Items

Classification	Evaluation item		
(1) Global warming (mandatory)	Contribution to reducing greenhouse gas emissions	Power consumption during operation	
(2) Resource saving (mandatory)	Amount of recycled plastics used	Weight of product/component	
(3) Recyclability	Number of components	Improvement of ease of disassembly	Standardization of materials
	Material labeling	Non-use of flame retardants	Reduction of instruction manuals
(4) Chemical substances	Reduction of substances of concern contained in products		
(5) Packaging materials	Packaging materials (plastics, etc.)	Weight and volume of packaging materials	

Expansion of Recycled Plastic Use

In order to expand the use of recycled plastics, we will promote the development and trial production of products using recycled plastics at relevant business sites.

Measures Regarding “Initiatives to Reduce Environmental Impact of Business Activities”

Setting CO₂ Emission Targets in Annual Plans and Formulating Measures

Business groups in charge of production works formulate CO₂ emission reduction plans and measures as part of their annual business plans. Based on these plans, they strive to reduce their CO₂ emissions.

Thorough Efforts to Improve Energy Efficiency in Buildings and Facilities

We strictly observe the Building Energy-saving Guidelines when planning the construction of new buildings or the refurbishment of existing structures, and the Production Facilities Energy-saving Guidelines when introducing new production facilities at our factories.

Expanding the Introduction of Renewable Energy

We will expand the introduction of renewable energy using the following two approaches.

- (1) Examine the best means for each region, including the installation of solar power generation systems, examination of other renewable energy sources, and utilization of the green electricity certificate, and identify issues.
- (2) Examine how to effectively utilize any surplus electricity from solar power generation, including the use of self-consignment systems.

Reduction of Plastic Waste

We will aim to achieve a 100% effective usage rate of used plastics by 2035. Toward this end, we will promote the visibility of waste sources and the quantitative management of plastic waste by setting target values. We will also survey and share information about recycling contractors possessing the required technologies.

Measures Regarding “Publicizing and Sharing New Values/Lifestyles”

We will further enhance our interaction with and contribution to local communities by holding the Satoyama Woodland Preservation Project and the Mitsubishi Electric Outdoor Classrooms in an integrated manner. We will also focus on environmental activities such as the cleaning of local areas, which will also help to spread information about plastic pollution in the world’s seas and oceans. The outcomes of our initiatives in Japan and overseas will be published as and when needed, and the Group’s contribution to environmental improvement will be made visible.

From the perspective of proposing new lifestyles, we will begin our efforts from within the Group, such as by making active use of remote working to save energy and optimize work-life balance, and encouraging the use of reusable cups/bottles to establish the habit of being environmentally conscious in all aspects of everyday life. By having each employee practice an environmentally conscious lifestyle, we hope to eventually spread these activities to local communities.

Environmental Considerations for Value Chain Management



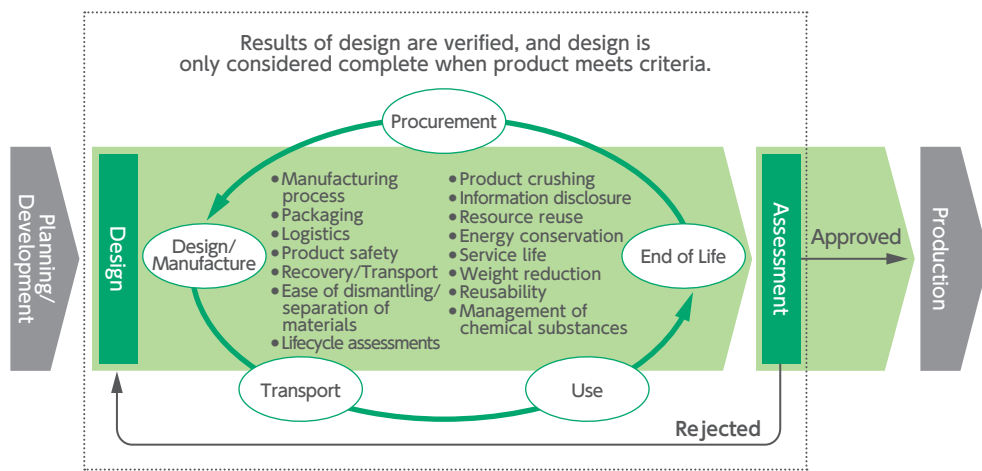
Implementation of Environmentally Conscious Design

Product Development in Consideration of the Overall Lifecycle of Products

As the concept of “lifecycle thinking” grows increasingly more important globally, the Mitsubishi Electric Group aspires to reduce environmental load by closely overseeing the entire product lifecycle, from collecting resources to design, manufacture, and disposal after use. Since fiscal 2004, product environmental assessments for all newly developed products have been implemented from the perspective of MET.* From fiscal 2016, we began operating the assessment based on the Design for Environment rules that conform to international standards focusing on lifecycle thinking. Furthermore, with regard to the index that measures improvements in the environmental efficiency of products (Factor X), we have established an original calculation method based on the MET standard so that it can be used for product environmental assessment.

* MET stands for material (effective use of material resources), energy (efficient use of energy) and toxicity (avoiding emissions of toxic substances with potential environmental risk).

The Concept of Design for the Environment



Product Environmental Assessment that Gives Consideration to MET throughout the Lifecycle of Products

Research and Development of Products and Technologies to Solve Environmental Issues

Example Development and Operation of ZEB for Net-Zero Energy Consumption

In October 2020, Mitsubishi Electric completed the construction of a net-zero energy building test facility, SUSTIE, on the premises of the Information Technology R&D Center (Kamakura City, Kanagawa Prefecture). This new facility conducts research and development aimed toward the further spread of ZEBs*1. Looking ahead to the future of ZEB, we are working to realize Mitsubishi Electric’s original ZEB+® (zeb plus)*2 concept and to enhance the functionality of buildings, for example by increasing the efficiency of working environments.



ZEB testing facility “SUSTIE”

SUSTIE has received ‘ZEB’ certification as well as the highest BELS*3 5-star rating with regard to the building’s energy efficiency. Additionally, it has acquired the highest Rank S certification in CASBEE Wellness Office*4, which is a certification system for the health and comfort of an office. SUSTIE became Japan’s first medium-sized office building (building alone) with a total floor space of more than 6,000m² to obtain both of these certifications. This proves that SUSTIE has simultaneously achieved “energy efficiency,” “comfort,” and “healthiness,” which has hitherto been considered difficult.

ZEB is more than just a building design. It is important for ZEB to be operated as planned at the time of design, as well as for it to be further improved based on the results of its operation. More than fifty different experiments are currently underway at SUSTIE. Relevant divisions across the company will be kept informed of the outcome of these experiments, so they can also be used for the development of new products.

*1 ZEB: Net-Zero Energy Building

*2 ZEB+®: Mitsubishi Electric’s unique initiative that aims to enhance building functionality by adding such values as productivity, comfort, convenience, and business continuity to ZEB, and managing a building throughout its lifecycle.

*3 BEL: Building-Housing Energy-efficiency Labeling System

*4 CASBEE Wellness Office: A tool for evaluating the specifications, performance, and efforts of the office area of buildings to support the maintenance and improvement of the health and comfort of their users.

Definition of ZEB

ZEB is a building designed for net-zero primary energy consumption on an annual basis. Buildings are classified into four ranks according to their reduction rate of primary energy consumption. SUSTIE is ranked in the highest ‘ZEB’ category, as it has achieved a reduction of 106% through energy saving and creating measures compared with the standard primary energy consumption.

ZEB Ranking (Classification According to Reduction in Primary Energy Consumption)

‘ZEB’	Energy savings (50% or more reduction) + 100% or more reduction through energy creation
Nearly ZEB	Energy savings (50% or more reduction) + 75% or more reduction through energy creation
ZEB Ready	50% or more reduction through energy savings
ZEB Oriented	30% or more or 40% or more reduction*5 through energy savings

*5 For buildings with a total floor space of more than 10,000 m². The required rate of energy savings varies depending on the type of facility.

Example Transformers That Use Vegetable Oil

Mitsubishi Electric also develops and manufactures a wide variety of products in the energy sector toward the realization of a sustainable society. At the Transmission & Distribution Systems Center Ako Plant, transformers for electricity distribution have been developed and manufactured using vegetable oil extracted from the nuts and seeds of plants and then refined. We have adopted vegetable oil for the internal insulation of transformers in consideration of its environmental friendliness and low risk of fire. Since 2017, these transformers have been installed in railway systems, airports, and industrial facilities.



MELCORE-NEO™, a transformer that uses vegetable oil

Mineral oil derived from crude oil has been used in transformers for over 100 years. However, as it is a non-renewable resource, we are currently in the process of transitioning to vegetable oil. Mitsubishi Electric will develop and manufacture transformers that use vegetable oil and establish diagnostic technologies for wider regions as our contribution to environmental consideration and stable power supply.

Characteristics of Vegetable Oils

Calculations show that vegetable oils reduce CO₂ emission equivalents by 90% compared to mineral oil throughout their entire lifecycle (figure 1), because the plants that are used to make them absorb CO₂ from the atmosphere during their growth. Additionally, the soybean oil that is used in our transformers is about four times more biodegradable than mineral oil (figure 2). In a fish acute toxicity test (OECD 203) which verifies impacts on aquatic life, soybean oil passed the Eco Mark certification criteria*. Therefore, it can be said that soybean oil is an environmentally low-risk material. Furthermore, as the flash point of vegetable oils is substantially higher than that of mineral oil (figure 3), the use of vegetable oils can reduce the risk of fire or explosion. Under the Fire Service Act, mineral oil is classified as a hazardous material, but vegetable oils are classified as designated flammable goods.

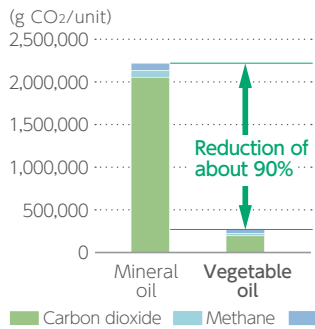


Figure 1: CO₂ emission equivalents

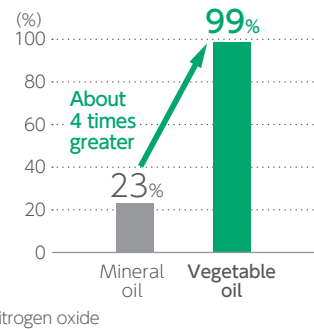


Figure 2: Comparison of biodegradability between mineral oil and vegetable oil

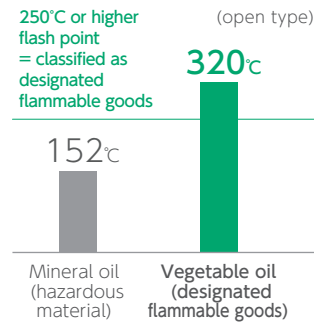


Figure 3: Comparison of flash point between mineral oil and vegetable oil

* Acquired Eco Mark certification as a biodegradable lubricant oil (certification number: 18110002)
Sources: Figure 1: NIST, "Determining the Environmental Preferability of a Biobased Oil" (2002)



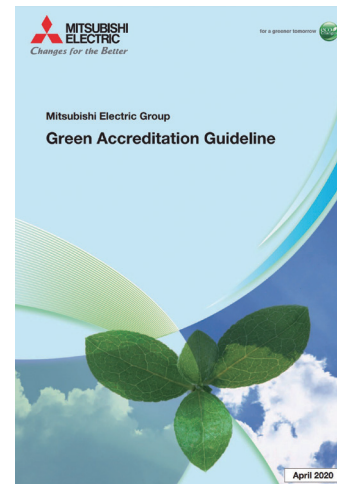
Reducing Environmental Risk through Operation of the Green Accreditation System

The Green Accreditation System Is Introduced in Consideration of Biodiversity and Environmental Risk

In April 2006, the Mitsubishi Electric Group introduced a Green Accreditation System based on the Green Procurement Standards Guide established in September 2000, and revised in July 2014. The Group is working to minimize environmental risks by evaluating the status of environmental management system accreditation acquired by suppliers, compliance with statutory and regulatory requirements, and management of chemical substances contained in products, while at the same time certifying suppliers that meet the Company's criteria and standards. When it comes to the status of chemical substance management, all evaluations are conducted taking into consideration aspects such as changes to regulations.

In fiscal 2011, Mitsubishi Electric added consideration for preserving biodiversity as an assessment criterion of the Green Accreditation System. We have also implemented a means of confirming whether or not our business partners have introduced initiatives to preserve biodiversity as well.

The overall Green Accreditation rate among Japanese and overseas suppliers of manufacturing materials essential to Mitsubishi Electric's manufacturing activities stands at 91% as of fiscal 2021. Guidance for improvement continues with the aim of achieving 100% in the future.





Reducing CO₂ from Production

Targets and Achievements

The Mitsubishi Electric Group continues to promote activities that combine the initiatives for reducing CO₂ originating from energy and for reducing non-CO₂ greenhouse gases (SF₆, HFCs, and PFCs) with the aim of reducing CO₂ emissions from production.

The 9th Environmental Plan (fiscal 2019–2021) is the final environmental program before Environmental Vision 2021 is to be achieved. The goal of this plan is to reduce total annual emissions of greenhouse gases to a CO₂ equivalent of 1.47 million tons or less in fiscal 2021. By achieving this, we will have outperformed our target of 30% reduction from the base year level*, which had been set at the time of formulating Environmental Vision 2021, and will actually achieve a 45% reduction from the base year level.

In fiscal 2021, emissions of greenhouse gases amounted to a CO₂ equivalent of 1.16 million tons and achieved our target of less than 1.47 million tons. One of the major factors behind this accomplishment is the steady reduction of CO₂ emissions originating from energy.

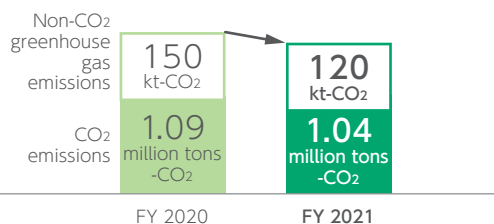
This was owing to the introduction of high-efficiency machinery, the switching of fuels, and the progress in thorough waste elimination. Another factor was the acceleration in the reduction of non-CO₂ greenhouse gases, owing to the replacement of traditional refrigerant gases with those having lower global-warming potential (GWP) and the increase in the amount of refrigerant gases recovered during manufacturing processes overseas.

In January 2020, the Mitsubishi Electric Group's targets of reducing greenhouse gases by 2030 were approved as science-based targets, certified by the Science Based Targets (SBT) Initiative. We will hereafter substantiate our roadmap for long-term reductions in greenhouse gas emissions and implement further measures.

* Base year for CO₂: Mitsubishi Electric Corporation, fiscal 1991; affiliates in Japan, fiscal 2001; and overseas affiliates, fiscal 2006.

Base year for non-CO₂ greenhouse gases: Mitsubishi Electric Corporation and affiliates in Japan, fiscal 2001; overseas affiliates, fiscal 2006.

Reducing CO₂ Emissions from Production (Mitsubishi Electric Group)



Note: Calculations were made using the following coefficients:

- Emission coefficient for Japan: 0.487 (published by the Federation of Electric Power Companies of Japan in 2013, when two nuclear power plants are in operation)
- Overseas emission coefficient: Calculated with reference to figures published by the Japan Electrical Manufacturers' Association (JEMA) in 2006.
- The global warming potential (GWP) of non-CO₂ greenhouse gases was calculated in reference to the figure published in IPCC's Second Assessment Report (1995).

Initiatives to Reduce CO₂ Originating from Energy and Their Results

Toward reducing CO₂ originating from energy, our activities focus on systematically introducing and updating high-efficiency and energy-saving equipment, improving operations, and extending energy conservation measures to production lines. As a result, we managed to reduce CO₂ emissions originating from energy by 17 kt to 1.04 million tons in fiscal 2021.

Half of the major achievements were realized through the introduction of high-efficiency machinery, while activities to develop energy-efficient technologies implemented by an internal technical committee also produced solid results. These activities also focus on visualizing and reducing the wasteful use of utilities and production equipment during non-operational hours.

In the classification system (SABC assessment) based on Japan's Energy Savings Law, 12 out of 20 specific Group companies in Japan, including Mitsubishi Electric, have been recognized as excellent business operators (S Class) in terms of energy conservation.

Initiatives to Reduce SF₆, HFCs and PFCs, and the Results

Three types of non-CO₂ greenhouse gases are emitted by the Mitsubishi Electric Group in its business activities: SF₆ (sulfur hexafluoride), HFCs (hydrofluorocarbons), and PFCs (Perfluorocarbons). SF₆ is used inside gas-insulated switchgear for electrical insulation, as well as in the etching process during semiconductor and liquid-crystal display production.

HFCs are used as refrigerants in air conditioners and refrigerators, while PFCs are used during the etching process in production of semiconductors and liquid-crystal displays.

In fiscal 2021, we continued our initiatives for switching to the use of refrigerants with lower GWP, improving operations, and achieving greater gas recovery and abatement. Owing to these measures, emissions turned out to be 62 kt less than our initial prediction, which anticipated a year-on-year increase due to growth in business. Due to an increase in production, increased emissions were anticipated, however there turned out to be a 29 kt reduction compared to the previous fiscal year.

Greenhouse Gases	Past Measures	8th Environmental Plan			9th Environmental Plan		
		2016	2017	2018	2019	2020	2021
SF ₆ (Sulfur hexafluoride)	Vacuum pump Recovery/abatement Early gas-leakage detection	Japan: Expand introduction of recovery/abatement systems					
		Overseas: Improve operation during filling process		Overseas: Strengthen SF ₆ reduction measures			
HFCs (Hydrofluorocarbons)	Recovery	Japan: Switch refrigerant (from R410A to R32)					
		Japan: Completed construction of refrigerant recovery scheme		Overseas: Switch refrigerant (from R410A to R32)			
		Overseas: Construct refrigerant recovery/disposal scheme					
PFCs (Perfluoro-carbons)	Recovery/abatement system	Japan: Expand introduction of recovery/abatement systems					

Under Environmental Vision 2023, our three-year plan that started in fiscal 2022, we set our target for total greenhouse gas emissions in fiscal 2024 at 1.2 million tons or less, corresponding to a 9% reduction from the base year of fiscal 2017, to conform to the target value required for Science Based Targets (SBT) certification. We also set forth the target of reducing the amount of emissions per unit of sales by 6% or more compared to the base year of fiscal 2020. Furthermore, we set a target of adopting CO₂-free renewable energy worth 2% of our electricity consumption during production (approx. 20,000 MWh/year).

Additionally, to ensure the achievement of Environmental Sustainability Vision 2050 and the SBT targets, we issued “Energy-Saving Guidelines” for buildings and production facilities.

- **Building Energy-Saving Guidelines**

These guidelines mainly require that consideration be given to the heat insulation performance of buildings when constructing new factories, and to the introduction of a certain amount of renewable energy.

- **Production Facility Energy-Saving Guidelines**

These guidelines cover energy-saving technologies in general and require active consideration of using Mitsubishi Electric products (e.g., high-efficiency electrical equipment, control devices to monitor energy savings, LED lighting, heat pumps, inverters, and regenerative electric power converters).

We will continue to promote thorough energy-saving activities through our business operations.

Reducing Resource Inputs

Targets and Achievements

The Mitsubishi Electric Group is reducing resource inputs by reducing the size and weight of its products. Our aim under the 9th Environmental Plan (fiscal 2019–2021) was to reduce resource inputs for 64 product groups by an average of 40% compared to fiscal 2001, and this reduction target was built into our product development plans. Individual products that are not continuously manufactured and products built to customer specifications are outside the scope of resource input reduction.

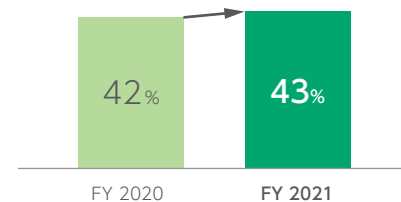
The average reduction rate of resource inputs was 43% in fiscal 2021, so we have achieved the target.

From Environmental Plan 2023 onward, we will work to reduce the size and weight of our products, as well as to promote the introduction of recycled plastics in order to reduce resource inputs. We set a target to increase the ratio of recycled plastics to total purchases of resin materials to 10% by fiscal 2024. In particular, we will actively utilize our Group’s plastic recycling technologies.

Products Making Notable Progress in Resource Reduction in Fiscal 2021 (Compared to Fiscal 2020)

- TFT-LCD modules: 12% reduction
- Hot water supply systems and equipment: 6% reduction
- IH cooking heaters: 6% reduction
- Gas-insulated switchgear: 5% reduction

Average Reduction Rates of Resource Inputs for 64 Product Groups with Fiscal 2001 as Base Year (Mitsubishi Electric Group)



Reducing Final Waste Disposal Ratios

Targets and Achievements

The Mitsubishi Electric Group focuses on the following three measures to reduce final disposal ratios: thorough analysis and separation of waste for conversion into valuable resources; higher levels of conversion into valuable resources through development of disposal contractors, sharing information about waste disposal contractors; and increasing the efficiency of waste (recycling) logistics.

Under the 9th Environmental Plan (fiscal 2019–2021), the target final disposal ratio is to be maintained at less than 0.1% for Mitsubishi Electric Group companies in Japan. In fiscal 2021, the ratio was 0.02%. Overseas affiliates had a final disposal ratio of 0.15% in comparison with their target of less than 0.5%, which meant the targets were achieved both in Japan and overseas.

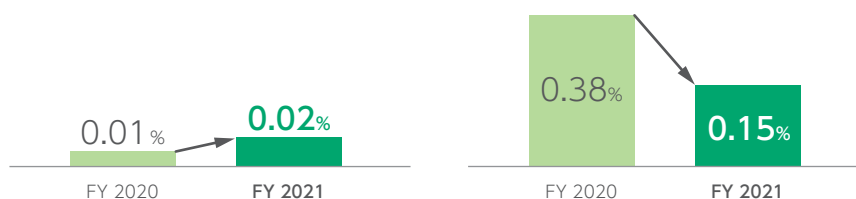
Results of Activities at Mitsubishi Electric Group Companies in Japan

Each Mitsubishi Electric production base manufactures different products, and therefore generates different kinds of waste. Thus, the general rule is for each base to create and implement its own plan. At the same time, however, all bases share management expertise and information on contractors, and cooperate with neighboring bases to ensure proper waste management.

In addition to the above, a waste control system has been introduced to all 26 Mitsubishi Electric production bases to strengthen compliance. Furthermore, affiliated companies in Japan make ongoing efforts to implement initiatives that have been proven effective at Mitsubishi Electric’s production bases, and to pursue thorough waste separation.

Final Waste Disposal Ratios

(Left: Mitsubishi Electric Group Companies in Japan, Right: Overseas Affiliates)



Total waste output amounted to 122 kt in fiscal 2021, a 11 kt reduction compared to the previous fiscal year.

Results of Activities at Overseas Affiliates

It is difficult to set the same target levels as Japan for overseas affiliates, as regulations and waste treatment practices vary by country and region. Nevertheless, there are some activities that can also be implemented overseas, such as thorough separation, recycling, improvement in the efficiency of collection and transportation, and expansion in recycling of used plastics.

In fiscal 2020, the final disposal ratio fell short of the target. Thus, in fiscal 2021, we addressed this issue by checking the status of waste discharge at overseas affiliated companies in cooperation with their supervising business groups and environmental offices in the region, and offered support in reducing the amount of landfill solid waste, sorting waste, and selecting disposal contractors. We also promoted plastic recycling at our European manufacturing bases.

Owing to these measures, we achieved our target with a total waste discharge of 77 kt and a final disposal ratio of 0.15%.

→For details on total waste discharge and the final disposal ratios, please refer to “Material Balance” on page 34.

Specification, Disposal and Transportation of Hazardous Wastes

The Mitsubishi Electric Group specifies hazardous wastes as follows, monitors their output and appropriately disposes of them in compliance with the laws and regulations of the regions in which our facilities are located. We also carry out material recycling and thermal recycling where we can in order to reduce final disposal (landfill) volume.

- Mitsubishi Electric and affiliates in Japan: “Specially-controlled industrial wastes” specified by the Japanese Waste Disposal Law
- Overseas affiliates: Hazardous wastes defined by local laws and regulations

Wastes containing polychlorinated biphenyl (PCB) are managed separately based on the “Law concerning Special Measures for Promotion of Proper Treatment of PCB Wastes, PCB Special Measures.” Please refer to “Preventing Environmental Incidents” on page 13 for details.

In fiscal 2021, total hazardous waste emissions of Mitsubishi Electric Group companies in Japan amounted to 1,341 tons, of which 1,091 tons were recycled. That of overseas affiliates totaled 4,107 tons, of which 1,239 tons were recycled.

Initiatives to Improve Effective Use of Plastic Waste

The Mitsubishi Electric Group set a target of achieving effective plastic utilization rates of 90% or more in Environmental Plan 2023, which started in fiscal 2022. This initiative is based on the “Ocean Plastics Charter” that was adopted at the G7 Summit, and the “plastic recycling strategies” formulated by the Japanese Ministry of the Environment. At our business sites across Japan, targets have been individually set according to their actual effective utilization rates from fiscal 2018 to fiscal 2020, and various initiatives are being made to ensure thorough sorting of plastic waste, carry out reviews of disposal contractors as necessary, and improve material recycling ratios for plastics, among others.

Reducing Water Usage

Targets and Achievements

Considering the increasing importance of water resources worldwide, the Mitsubishi Electric Group is continuously measuring data on water used/reused at all of its 96 business sites in Japan and overseas. These figures are checked on a regular basis for any significant change, and depending on the findings, necessary measures are taken when needed. Any effective case examples are shared with other business sites on occasions such as Key Environmental Personnel Liaison Meetings to be implemented laterally.

Our aim under the 9th Environmental Plan (fiscal 2019–2021) was to reduce water usage per unit of sales by 1% per annum compared to fiscal 2011. Based on this, we engaged in thorough management of water usage/drainage volumes and reducing water usage by saving and reusing water.

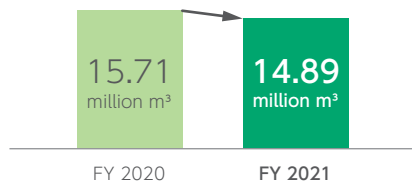
In fiscal 2021, water usage totaled 14.89 million m³ by the Mitsubishi Electric Group, of which 4.55 million m³ was reused water, corresponding to a reuse ratio of 31%. Additionally, water usage per unit of sales was 3.55 (m³/million yen), marking a reduction by 20% compared to the base year (fiscal 2011).

In Japan, water used in production processes was recycled for reuse in the same processes, and treated wastewater was used for flushing toilets and refilling cooling towers to promote the use of gray water. Rainwater was also used to reduce the use of groundwater. As a result of these initiatives, water usage totaled 13.17 million m³, of which 4.41 million m³ was reused water, corresponding to a reuse ratio of 33%. Outside of Japan, we focused on reducing the amount of water intake by reusing water and expanded the use of gray water. Owing in particular to initiatives taken at our business sites in China to conserve water and reduce water usage by increasing water reuse, water usage amounted to 1.72 million m³, of which 0.14 million m³ was reused water, corresponding to a reuse ratio of 8%.

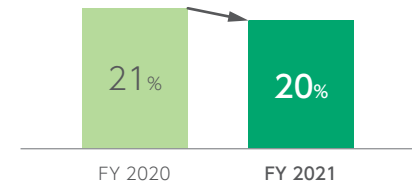
Going forward, we will continue to examine the improvements that need to be made at the business sites that have been newly identified as high-risk sites in accordance with the revised WRI Aqueduct*¹ assessment tool, and conduct activities for their improvement. At other business sites, we will strive to reduce our environmental impact by saving water and reducing water intake while giving due consideration to the local water environment.

*¹ WRI Aqueduct: Water risk assessment tool developed by the World Resources Institute (WRI)

Total Water Usage
(Mitsubishi Electric Group)



Ratios of Reductions in Water Usage per Unit of Sales with Fiscal 2011 as Base Year
(Mitsubishi Electric Group)



→For details on total water usage, please refer to “Material Balance” on page 34.

Managing Water Risk

Water risk is increasing worldwide with ever-more serious water shortages and pollution, as well as abnormal weather caused by climate change. This affects the production of both raw materials and products, leading to a corresponding interest in corporate water risk management.

Water risk within the Mitsubishi Electric Group is evaluated as part of our corporate risk management framework. The evaluation factors in the influence on stakeholders, as well as the impact on ecosystems. We use the results of this assessment to prioritize countermeasures for each production base and take clear action.

During product development, we evaluate product impact on water sources and their lifecycles and strive to minimize the impact.

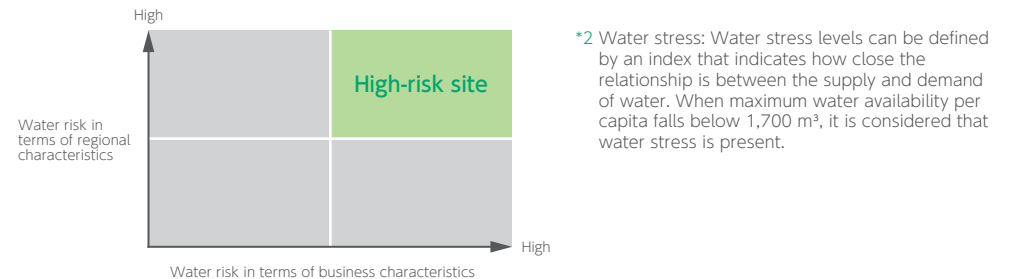
Response to High-Risk Sites

The Mitsubishi Electric Group uses WRI Water Aqueduct and other risk assessment tools to keep track of current and future water risk at business sites both in Japan and abroad (including the presence of water stress*²).

Based on this data, in fiscal 2021, overseas business sites with particularly high water risks have been identified as high-risk sites in consideration of their regional characteristics (i.e., seasonal high water/drought conditions of oceans and rivers from which water is taken) and business characteristics (i.e., water usage accompanying production activities). By distributing survey sheets to these high-risk sites, we confirmed the status of water conservation at facilities that use water and their efforts to reuse water. In fiscal 2022 and after, we will continue to make improvements based on the results of these surveys.

In addition, in Environmental Plan 2023, which started in fiscal 2022, we set a target to reduce water intake per unit of sales by 4% or more compared to fiscal 2020 by fiscal 2024 at high-risk sites.

We will continue to strengthen our efforts based on this policy with a focus on high-risk sites.



Tool Used
WRI Aqueduct 3.0

Status of Water Intake/Drainage/Reuse

Status of Water Intake

At business sites of the Mitsubishi Electric Group, water is taken to be used mainly for cooling, cleaning and adjusting the concentration of water-based paints, and as a solvent, an additive to materials and a heat medium. Water intake in fiscal 2021 was 10.35 million m³, 0.71 million m³ less than the previous fiscal year.

Status of Water Drainage

To avoid exceeding standard values set for each drainage point, the Mitsubishi Electric Group has established even more stringent voluntary standards, based on which water is treated before it is discharged. When there is a certain drainage standard in place according to properties specific to the water area, such a standard is also incorporated into our standards. The compliance of these standards is confirmed through measurements conducted on a regular basis.

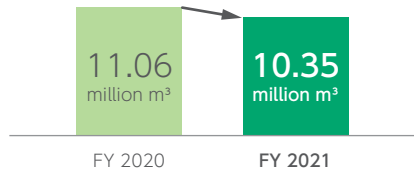
Water drainage in fiscal 2021 was 8.16 million m³, 0.48 million m³ less than the previous fiscal year.

Status of Water Reuse

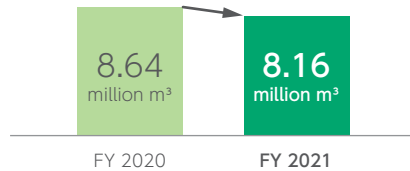
At Mitsubishi Electric Group's factories, not only fresh intake water, but water that has been used once is reused after it is treated and recycled.

Reused water totaled 4.55 million m³ in fiscal 2021, corresponding to a reuse ratio of 31%.

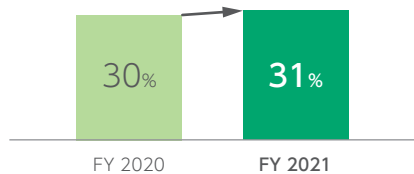
Water Intake
(Mitsubishi Electric Group)



Water Drainage Volume
(Mitsubishi Electric Group)



Water Reuse Ratio
(Mitsubishi Electric Group)



→For details, please refer to “Amount of Water Intake/Drainage/Reuse” on page 36.

Receiving “A-List Company” Recognition, the Highest Evaluation from CDP* for Fifth Consecutive Year

Mitsubishi Electric has been named an A-List company in the CDP Water Program for the fifth consecutive year, from fiscal 2017 to 2021. The CDP awarded us this highest evaluation in recognition of exceptional activities in terms of measures and strategies for water resources.

We will continue to press forward with our efforts to contribute to the realization of a sustainable society.

* CDP: An international NGO that examines, evaluates and discloses environmental initiatives of corporations and cities.



Managing Chemical Substances

Tracking the Use of Controlled Chemical Substances with Our Own Chemical Substance Management System

Mitsubishi Electric Group companies in Japan have been managing internally defined controlled chemical substances on a voluntary basis since 1997.

In particular, chemical substances contained in products are managed in Japan and abroad using the MelHARo-web chemical substance management system, which includes procurement information for both materials and parts. From fiscal 2022, a newly added feature allows for information entered into the MelHARo-web system to also be registered in the European Chemicals Agency*1's SCIP database*2. In addition to these administrative efforts, we are also implementing an initiative to systematically reduce the use of chemical substances that are expected to be restricted by future laws and regulations.

We also apply our Chemical Substance Management System to the management of release and transfer of substances regulated by the PRTR Law*3 (PRTR*4) and volatile organic compounds (VOCs). Sulfur oxide (SOx) and nitrogen oxide (NOx) are also managed using our voluntary standards based on the laws and regulations of the regions where our business sites are located. We will continue to track and manage our use of these substances, and eliminate any unnecessary use.

*1 European Chemicals Agency (ECHA): A European Union organization that supervises the management of chemical substances.

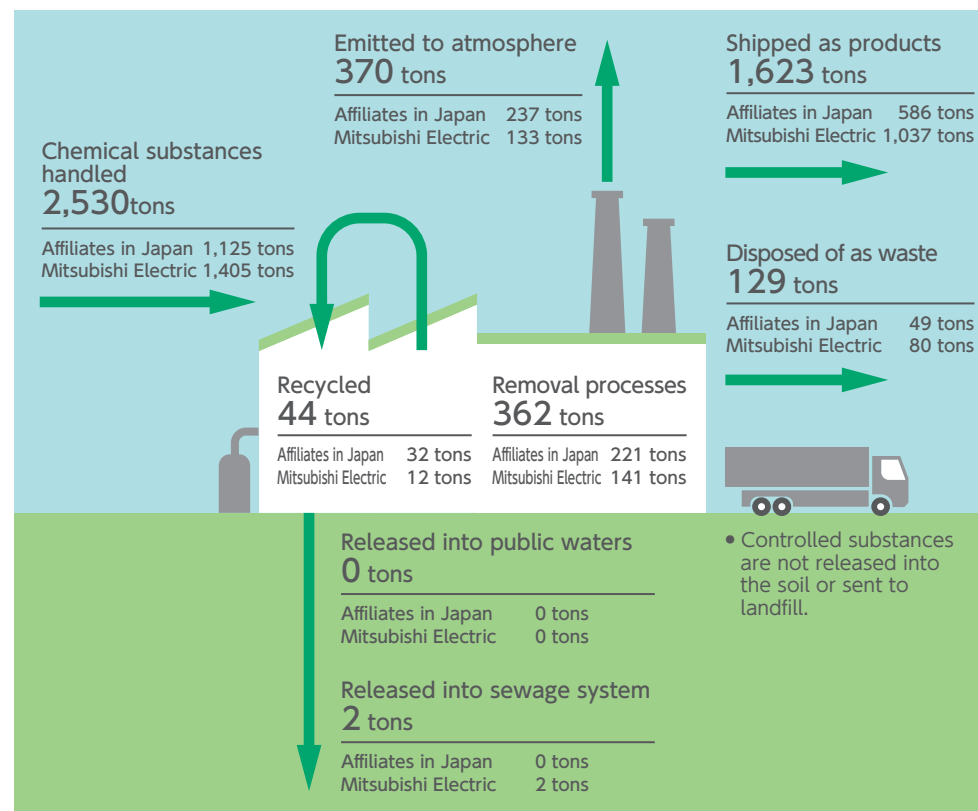
*2 SCIP or Substances of Concern In articles as such or in complex objects (Products) database: A database of information on chemical substances contained in products managed by ECHA.

*3 PRTR Law: Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof.

*4 PRTR: Pollutant Release and Transfer Register. A system under which companies track the quantity of substances potentially harmful to human health or the ecosystem which are released into the environment or transferred inside waste material, and report this data to government authorities. The authorities then use these reports and other statistics to produce estimates on release and transfer, and announce them publicly.

→For details on the release and transfer of chemical substances, please refer to "Material Balance" on page 34.

Fiscal 2021 Release and Transfer of Substances Regulated by the PRTR Law (Mitsubishi Electric Group Companies in Japan)





Reducing the Use of Disposable Packaging Materials

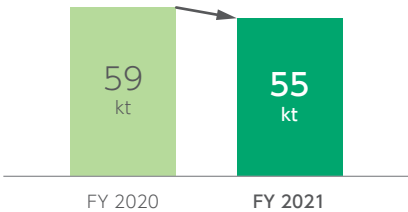
Achievements of Mitsubishi Electric Group Companies in Japan in Fiscal 2021

Improvements in logistics are part of Mitsubishi Electric Group's Just-In-Time improvement activities. Our fundamental principle in this area is to reduce the weight of transport packaging while ensuring that products are delivered safely to customers. Based on this line of thinking, we practice the 3Rs in packaging: reduce (simplify packaging), reuse (more returnable containers and packaging), and recycle (recycling of used packaging material).

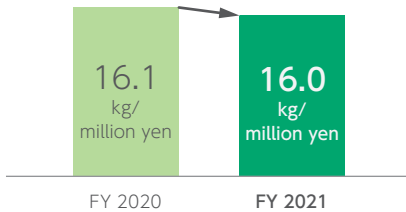
At Mitsubishi Electric Group companies in Japan, simpler packaging is promoted, and the use of returnable containers and packaging has been expanded. Owing to these initiatives, the amount of packaging materials used was 55 kt (down 4.7 kt from the previous fiscal year), and the amount per unit of sales was 16.0 kg/million yen (down 0.6% from the previous fiscal year).

The amount of packaging materials used by our 22 overseas affiliates was 58 kt, and the amount per unit of sales was 71 kg/million yen (a fall of 19% compared to the previous fiscal year).

Usage of Packaging Materials (Mitsubishi Electric Group Companies in Japan)



Packaging Materials Used per Unit of Sales (Mitsubishi Electric Group Companies in Japan)



→For the actual results of the usage of packaging materials, please refer to "Material Balance" on page 34.

Reducing CO₂ from Logistics

Basic Policies on Logistics (Distribution)

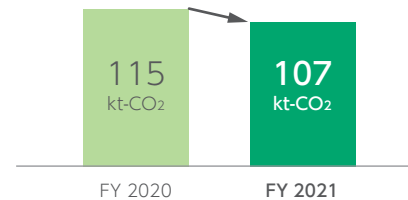
The Mitsubishi Electric Group carries out just-in-time improvement activities to improve logistics. These activities aim to visualize logistics work by quantification, and to eliminate irrational, irregular, and wasted efforts to improve transport efficiency and economy, and to reduce environmental impact through "Eco-Logistics" (Economy & Ecology Logistics).

Fiscal 2021 Achievements of Mitsubishi Electric Group Companies in Japan

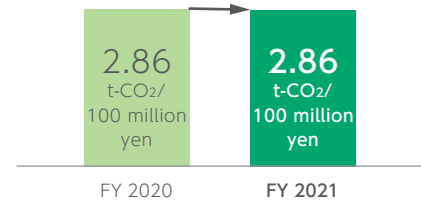
At Mitsubishi Electric Group companies in Japan, the following measures continued to be implemented throughout fiscal 2021. As a result, CO₂ emissions totaled 107 kt-CO₂, and the amount per unit of sales amounted to 2.86 t-CO₂/100 million yen .

- Reviewing transportation routes
- Switching from truck transportation to rail transportation (modal shift)
- Reducing the number of trucks by improving load ratios (including Container Round Use)

Total CO₂ Emissions from Distribution (Mitsubishi Electric Group Companies in Japan)



CO₂ Emissions per Unit of Sales from Distribution (Mitsubishi Electric Group Companies in Japan)



* This figure has been altered in accordance with the new aggregation method.

Regarding overseas affiliates, the amount of CO₂ emitted by a total of 21 companies was 278 kt, amount per unit of sales amounted to 35.8 t-CO₂/100 million yen.

→For the actual results of CO₂ emissions and amount per unit of sales from distribution, please refer to "Material Balance" on page 35.



Contribution to Reducing CO₂ from Product Usage

As many tens of times more CO₂ is emitted during product usage than during production, the Mitsubishi Electric Group has designated Reducing CO₂ from Product Usage and Expansion of Contribution to Reducing CO₂ from Product Usage as priority issues, and is working to improve its products.

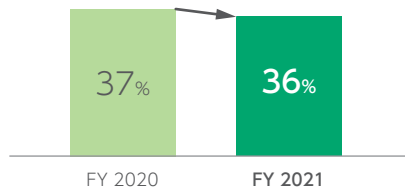
Targets and Achievements for Reducing CO₂ from Product Usage

Power consumed by customers during product use is viewed as corresponding to the amount of CO₂ emissions resulting from generating that power. Increasing product energy efficiency can reduce CO₂ from product use. Under the 9th Environmental Plan (fiscal 2019–2021), the Mitsubishi Electric Group’s goal was to achieve an average reduction rate of 35% compared to fiscal 2001 for CO₂ emissions from product usage.

In fiscal 2021, sales of high energy-efficiency air conditioning systems declined due to limited economic activities overseas and suppressed capital expenditure in Japan and abroad. As a result, the average reduction rate decreased compared to fiscal 2020.

However, improvements were made in the energy efficiency of various other products, including power devices and hot-water supply systems and equipment. As a result of promoting the sales of these products, the average reduction rate for 98 targeted product groups came to 36% compared to fiscal 2001, and we thus achieved our target.

Average Reduction Rates of CO₂ from Product Usage for 98 Product Groups with Fiscal 2001 as Base Year (Mitsubishi Electric Group)



Targets and Achievements for Expansion of Contribution to Reducing CO₂ from Product Usage

The Mitsubishi Electric Group is working to visualize and expand our Contribution to Reducing CO₂ from Product Usage. Contribution to reducing CO₂ is represented by the amount of generated CO₂ deemed saved by switching from older products to new, energy-efficient ones. The calculation is based on the following formula, which multiplies the effect of reducing CO₂ over the life of the product by the number of units sold.

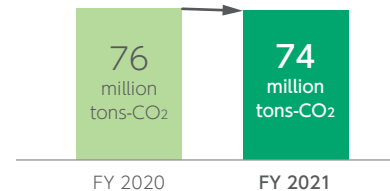
$$\text{Contribution to reducing CO}_2 = \text{Effect of reducing CO}_2 \text{ from product usage per unit} \times \text{Number of units sold during the fiscal year}$$

We use official standards and industry-mandated calculation method when computing our contribution to reducing CO₂. Where no calculation method is specified, we make calculations based on our own product scenarios. Calculations for interim products are based on GHG Protocol Scope 3 Guidance, with proportional division by product weight and percentage of sales.

We made continuous efforts to achieve the target set forth in the 9th Environmental Plan (fiscal 2019-2021) of maintaining the contribution to reducing CO₂ from product usage at 70 million tons.

In fiscal 2021, the decline in new car sales across the world except in China led to a decrease in sales in the industrial mechatronics division. Additionally, limited economic activities overseas and suppressed capital expenditure caused a decrease in sales in the home electronics division. As a result, our contribution to reducing CO₂ was lower than the previous year. On the other hand, improvements were made in the energy efficiency mainly of power devices and hot-water supply systems and equipment, such that by promoting the sales of these products, we contributed to reducing CO₂ from product usage by a total of 74 million tons, and thus achieved our target.

Contribution to Reducing CO₂ from Product Usage (Mitsubishi Electric Group)



Under Environmental Plan 2023, we will continue our company-wide efforts to improve the energy efficiency of our products as we have done under previous environmental plans, and will strive to reduce CO₂ emissions through the utilization of key, in-house devices (e.g., power devices and inverters). We have not specified targets for the period covered by the current plan, but we will strengthen our efforts with the aim of achieving a 1% improvement over the previous models in contribution to reducing CO₂ emissions per product by fiscal 2024.

Breakdown of Products Included in the Calculation for Contribution to Reducing CO₂ from Product Usage

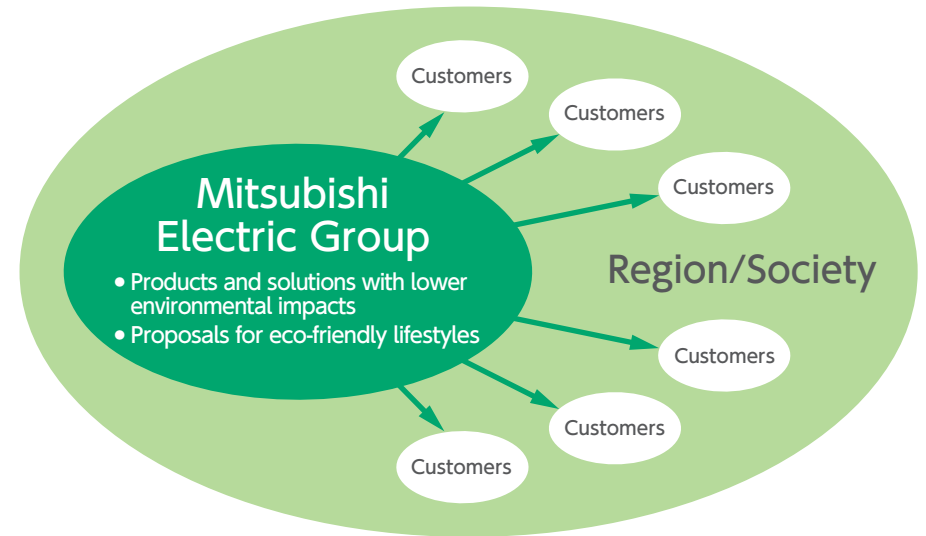
Products (Number of Product Groups)	Examples of Products	Standard/Benchmark Used for Calculation
End Products (82)	Plant monitoring control systems, railcar air-conditioning systems, onboard information systems (TIS, ATC, TIMS), monitor/protection control systems for power generation plants, circuit breakers, elevators, intelligent transport systems (ITS), satellite communications earth station facilities, optic/wireless access systems, air conditioners, televisions, refrigerators, heat exchange ventilation equipment, processing machines, robots, lighting fixtures / lamps, IH cooking heaters, etc.	Contribution from reducing power consumed by the product
	Energy-saving support equipment, elevator modernization, heat exchange ventilation equipment	Reduced power utilization through introduction of energy efficiency enhancing devices, contribution from upgrading to highly efficient components during refurbishment, previously wasted energy used by heat exchange
	Circuit breakers, switchgear	Reduction in leaked SF ₆ gas (CO ₂ equivalent)
	Photovoltaic power generators, turbine generators	Power produced minus energy used for power generation, increase in power generated by improving efficiency
Interim Products (32)	Compressors purchased separately from air conditioners	Contribution from incorporation of products with lower power consumption
	Inverters, motors	Contribution from incorporation of products with lower power loss
	Power devices	
	Electric power steering, alternators, starters	Contribution from incorporation of products with greater fuel efficiency, proportionally divided by weight
	Combined-cycle thermal power generators	Reduction of fossil fuel use by replacement of old thermal power generators. Contribution calculated as reduction in CO ₂ emissions proportionally divided by sales

Note 1: Calculations for products using electricity are based on the national or regional CO₂ emission factors given in CO₂ Emissions From Fuel Combustion Highlights (2013 Edition).
Note 2: Calculations for thermal power generation use thermal power generation factors from the calculation method in the Initiative for Creating a Low-Carbon Society, issued by four electrical and electronics industry associations.
Note 3: Calculations for other forms of energy use and greenhouse gases use factors from the Greenhouse Gas (GHG) Emissions Accounting and Reporting Manual issued by the Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry.

Providing Information and Proposals to Support Customers' Efforts to Reduce their Environmental Impact

The Mitsubishi Electric Group develops and offers products and solutions with lower environmental impacts to help customers reduce as much of their environmental impact as possible in their daily business or life. At the same time, we make an effort to share information on eco-friendly lifestyles.

Reducing Environmental Impact on Society as a Whole from Two Approaches



As an example of these initiatives, we share information with our customers through our websites. This information includes power-saving advice related to how best to use our products, as well as examples of the successful introduction of products and services that contribute to reducing environmental impact.



Recovery/Recycling of Used Home Appliances at a Specialized Recycling Plant

In 1999, the Mitsubishi Electric Group began operations of the industry’s first home appliance recycling plant (Hyper Cycle Systems Corporation (HCS)), and has recycled 940 kt*1 of appliances by the end of fiscal 2021. In fiscal 2021, we recycled 39 kt*2 of recovered appliances in the four categories of home appliances that are required to be recovered and recycled under Japan’s Home Appliance Recycling Law*3.

*1 Total weight recycled by Mitsubishi Electric and other manufacturers

*2 Weight of the four categories of Mitsubishi Electric appliances that have been recycled or otherwise processed

*3 Air conditioners, televisions (CRT, LCD and plasma), refrigerators/freezers, and washing machines/tumble dryers.



Mitsubishi Electric holds Environmental Design Technology Seminars to showcase technologies developed at its recycling centers and see how they can be applied to everyday product design. Developing technologies for sorting materials recovered from end-of-life home appliances and techniques applicable to recycled materials also increases the amount of recycled material that can be used in our products.

Recycling Personal Computers

Mitsubishi Electric promotes recycling of end-of-life personal computers and monitors. In fiscal 2021, we recovered a total of 5,960 office and home computers, with recycling ratios above statutory targets*4.

Although preventing data leaks from hard drives during disposal of personal computers is essentially the user’s responsibility, our subcontracted recycling agents do all they can to prevent data leaks, for example punching holes in hard drives and exposing them to strong magnetic fields to ensure physical and magnetic destruction. For office computers, we offer a paid service where customers can ask for all data to be erased by specialized software before recovery.

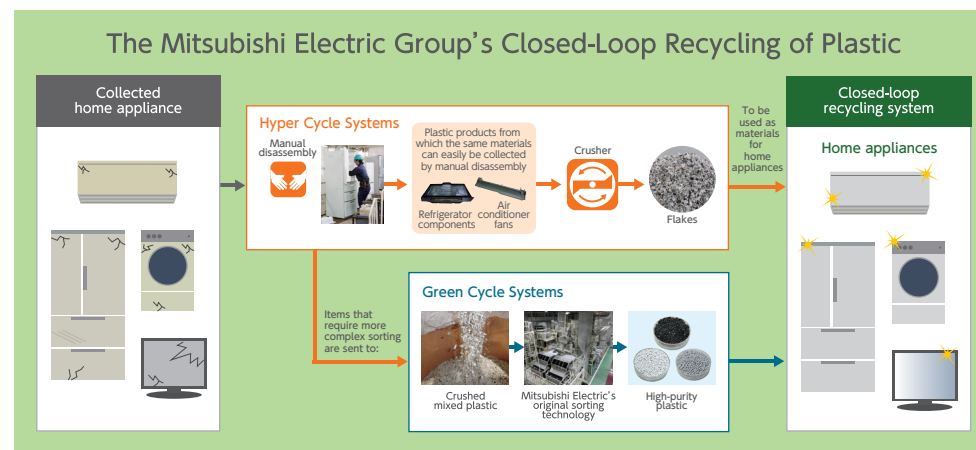
*4 Desktop computers: 50% or more
 Notebook computers: 20% or more
 CRT displays: 55% or more
 LCD displays: 55% or more

Closed-Loop Recycling of Plastic

What Is the Mitsubishi Electric Group’s “Closed-Loop Recycling” Initiative?

Since 2010, the Mitsubishi Electric Group has been fully implementing “closed-loop recycling,” in which plastic recovered from used home appliances is reused in Mitsubishi Electric’s new home appliance products. In this recycling system, it is important to collect as much plastic without foreign matter as possible from products composed of diverse materials.

Hyper Cycle Systems (HCS), a home appliance recycling plant, and Green Cycle Systems (GCS), a plant which sorts plastic, play the main role in this initiative. HCS first disassembles used home appliances, which are then crushed with machines. Among them, selected plastics are then sent to GCS, which sorts different types of plastic. GCS currently recycles approximately 80% of the mixed plastic it procures into “high-purity plastic” at a level of quality equal to virgin materials. In these processes, the Mitsubishi Electric Group’s various technologies are utilized to achieve high-precision separation. We are also developing new technologies as needed.



→For recycling of home appliances, please refer to the websites below.

Defining a Recycling-Based Society

https://www.MitsubishiElectric.com/en/sustainability/environment/ecotopics/plastic_sp/defining/index.html

Hyper Cycle Systems: Reclaiming Resources from End-of-Lifecycle Products

https://www.MitsubishiElectric.com/en/sustainability/environment/ecotopics/plastic_sp/hypercycle/index.html

Green Cycle Systems: Refining Old Plastics into Industrial-Grade Materials

https://www.MitsubishiElectric.com/en/sustainability/environment/ecotopics/plastic_sp/greencycle/index.html

Biodiversity Preservation Activities

Biodiversity Preservation Measures at Business Sites

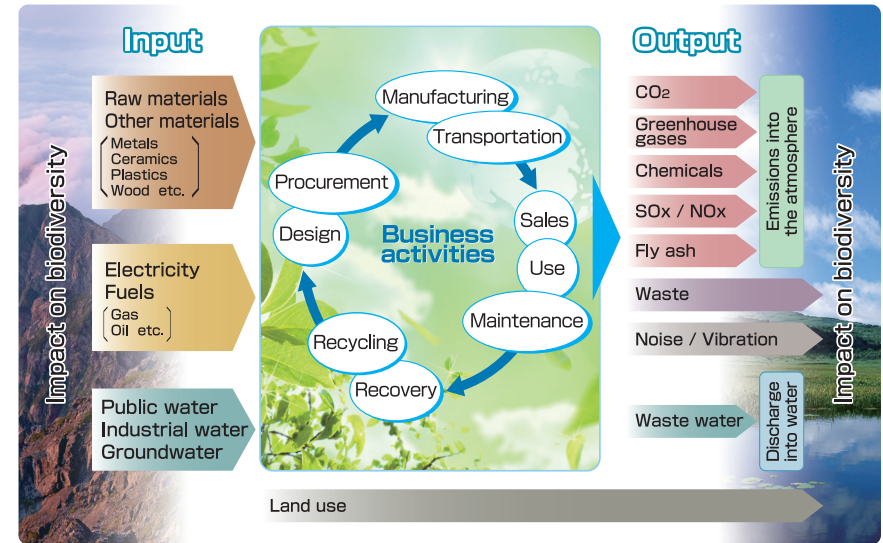
All human activities benefit from the workings of a wide variety of organisms living on earth. At the same time, various activities by human beings are destroying ecosystems and are otherwise having serious effects on biodiversity. Now, at a time when the extinction of many species is being reported, biodiversity preservation is a shared issue for all humanity.

In 2010, the Mitsubishi Electric Group introduced the Biodiversity Action Guidelines. These guidelines have two main features: (1) they include the pledge of every Mitsubishi Electric Group employee to understand the relationship between business activities and biodiversity in order for the Group to consider biodiversity in all of its business activities; and (2) they are structured according to each stage of the product lifecycle to facilitate this. Furthermore, in Environmental Sustainability Vision 2050, which was set forth in June 2019, "Activities to Preserve Biodiversity" are recognized as one of the key activities leading up to 2050. Through these activities, we are striving to live in harmony with nature while also interacting with local communities.

Visualizing the Relationship between Business Activities and Biodiversity to Implement Proper Action

To deepen employee understanding of biodiversity, Mitsubishi Electric has summarized the relationship between the company's business activities and biodiversity in a chart as shown below. Using this chart, the Mitsubishi Electric Group's business sites both in Japan and overseas are renewing their awareness of relations between their own business activities and the biodiversity and natural environment of their surrounding region, and are linking this awareness to concrete actions that contribute to communication with local communities and to the preservation of biodiversity.

Relationship between Business Activities and Biodiversity



Biodiversity Preservation Activities

Activity	Purpose	Details
Mitsubishi Electric Outdoor Classroom →Please refer to page 32 for details.	Foster environmental awareness among employees	In natural classroom settings such as woodlands, parks, waterways, and seacoasts, employees who serve as leaders invite families to experience nature to learn about the interrelationship between living creatures.
"Satoyama" Woodland Preservation Project	Contribute to society, drawing on the voluntary efforts of employees	Employees strive to restore parks, woodlands, rivers, and other natural areas located close to business sites.
Preserving biodiversity at business sites	Activities centered around co-existence with nature carried out at business sites	Confirmation and appropriate management of rare species, endemic species, and non-native species; promotion of co-existence with nature; and gaining an understanding of our involvement with the surrounding natural environment.

Aiming for a Higher Level of Activities

The Mitsubishi Electric Group engages in initiatives that give specific consideration to all species of living creatures. These initiatives include the Mitsubishi Electric Outdoor Classroom, the Satoyama Woodland Preservation Project, and measures to reduce the impacts of development pressure*1 and alien species pressure*2 on ecosystems. As the basis of these initiatives, we have been promoting a biodiversity preservation policy at business sites since fiscal 2015, with a focus on improving the quality of greenery within the premises of all business sites. The policy aims for all employees to make a direct contribution to regional/urban ecosystems in areas around their site by working to preserve biodiversity at their own workplace. It also encourages employees to take positive and voluntary action by regarding biodiversity as a personally relevant issue.

As these initiatives have spread to a certain extent, in fiscal 2020, we embarked on establishing a structure to consistently step up our activities. In March 2020, an internal technical committee formulated the Biodiversity Guidelines (a check sheet). Since then, the implementation level of activities and the quality of greenery at each business site in Japan have been assessed in numbers for quantitative monitoring. In fiscal 2022, we will implement these guidelines on a trial basis with a view to introducing them to affiliated companies across Japan. At the same time, we will calculate the rates of improvement in assessment over the base year, and will make the results of these improvements and refinements visible in this way every year, to firmly establish our ecosystem improvement activities.

*1 Development pressure: An action resulting in the destruction of habitats. The construction of a new business site and development (including that in the supply chain) intended to extract natural resources are deemed as such behaviors. One such example is when the use of water by operations affects the surrounding area, the source of water, and subsequently the habitats of living creatures.

*2 Alien species pressure: When ditches, greenery at the side of buildings, and hedges are created, non-native species of insects, vegetation, etc. may be introduced. The unintentional transfer of living creatures could pose a threat to the habitats of indigenous species or trigger genetic pollution.

Improving Enterprise Value through a Long-term Commitment to Environmental Initiatives

The destruction of the global ecosystem by human activities is the essence of environmental issues. Biodiversity preservation is essential for the continued existence of us human beings, and should be prioritized in all human activities. This is now a prevalent belief, as also clearly expressed in the Aichi Target*1 and the National Biodiversity Strategy of Japan*2 2012–2020.

As it takes many years to maintain and enhance biodiversity, steady and continuous efforts are required.

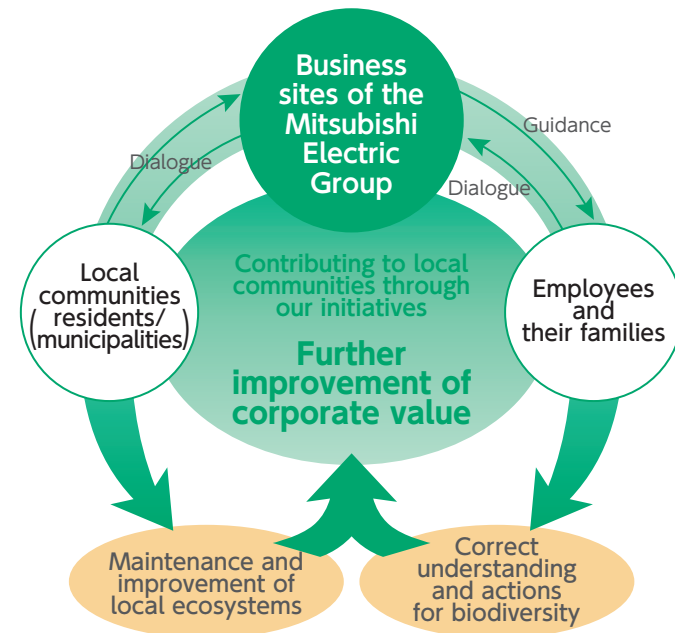
The Mitsubishi Electric Group is committed to contributing to the achievement of the Aichi Target and attainment of the SDGs*3, and to implementing biodiversity preservation activities as part of its business activities. Through initiatives related to the above, we will further contribute to preserving regional ecosystems, and by earning respect and trust from local communities, we will strive to improve our corporate value.

*1 Aichi Target: Global target adopted by the 10th meeting of the Conference of the Parties to the Convention of Biological Diversity (COP 10) held in October 2010.

*2 National Biodiversity Strategy of Japan: Japan's baseline plan regarding the preservation and sustainable use of biodiversity, based on the Biodiversity Treaty and the Biological Diversity Act.

*3 SDGs (Sustainable Development Goals): Sustainable development goals to be achieved by 2030 included in the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly in September 2015.

Activities Contributing to Local Ecosystems



Improving the Quality of Greenery in Line with Three Courses of Action

The Mitsubishi Electric Group has set forth three courses of action as guidelines for all business sites. They are: (1) reducing negative impact on living creatures, (2) aiming for a richer symbiosis with other living creatures, and (3) restoring the relationship between employees and nature in the working environment. At each business site, action plans provide for the preservation of local indigenous species, control of alien species, and development of green space in consideration of the surrounding ecosystem, to ensure these initiatives are steadily addressed in all businesses.

Three Courses of Action

Courses of Action	Examples	
A Reducing negative impact on living creatures	1. Control development pressure and alien species pressure*	(1) Assessment of impacts on living creatures (2) Alien species control
	2. Call attention to and preserve rare species and endemic species	(1) Disclosure of list of living creatures on premises (2) Preservation of rare species and endemic species (3) Cooperation in regards to conservation issues for surrounding areas
	3. Manage pesticides, preserve greenery and natural resources	(1) Control the killing/harming of living creatures (2) Consideration to natural resources, such as water and soil
B Aiming for more fruitful symbiosis with other living creatures	4. Set up functional greenery	(1) System to manage green space (2) Management of land used by flying organisms (3) Development of priority land for greenery and living creatures (4) Provision of continuity of greenery with areas surrounding business sites (5) Contribution to biodiversity preservation activities in areas surrounding business sites
	5. Break away from agricultural orientations such as simplifying/specifying greenery	(1) Diversification/multi-stratification of vegetation (2) Management of greenery that accords with the characteristics of plants, etc. (3) Contribution/consideration to regions
	6. Proactively utilize ecosystem services in the workplace (break rooms, individual floors)	(1) Provision and utilization of opportunities for cultural services (2) Provision and utilization of opportunities for supply services
C Restoring the relationship between employees and nature in the working environment	7. Change situation from everyone being disinterested and unrelated to everyone being involved	(1) Education for understanding and promoting action (2) Creation of relationships through the workplace or work duties

* Activities are carried out pursuant to the regulation on raising, planting, storing, carrying, or other handling of specified IAS in the Invasive Alien Species Act.

Mitsubishi Electric Outdoor Classroom

Mitsubishi Electric Outdoor Classroom is one of the directives of “fostering environmental awareness” aimed at the realization of a society in tune with nature. These classrooms utilize nearby natural habitats and provide an opportunity for participants and classroom leaders alike to experience nature.

Contemplating the Necessity of Preserving Nature and Taking Action

The Mitsubishi Electric Group is developing personnel who contemplate what is necessary to preserve nature and then take action themselves; in other words, people who are environmentally aware. We want participants to get in touch with nature so that they can realize the impact humans have on nature, increase their awareness of the importance of preserving nature, and take action to reduce their environmental load as much as possible (see the figure below). Biodiversity is essential to the continuation of our business activities. On the other hand, our activities such as consuming various resources, discharging chemical substances, and producing waste place a burden on ecological systems on a daily basis. We must be aware of this and contribute to reducing the negative impact on the water, air, and soil, in addition to reducing our environmental load and helping to improve the environment through our products.

The foundations of environmental awareness are strengthened deeply and strongly through “fully experiencing nature with the five senses.” The Outdoor Classroom is our initiative to allow ourselves, together with our employees, their families, and local communities, to discover ecology (relationships among living creatures) through experiencing nature. Preserving nature cannot be achieved by the Mitsubishi Electric Group alone. Therefore, it is vital that environmental awareness is spread to various groups of people.

Since the program began in October 2006, the Outdoor Classroom has been playing a role as an opportunity for contributing to society and the environment, and has acted as a forum for communication within each region.

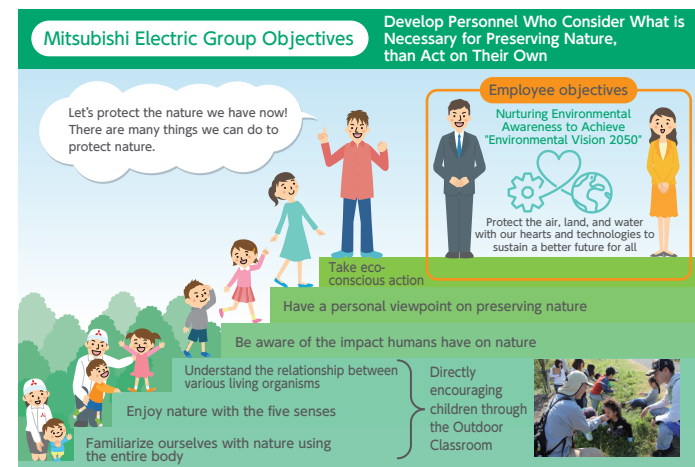


Illustration prepared while referring to a pamphlet introducing the Japan Association for the Promotion of Outdoor Life

Features of the Mitsubishi Electric Outdoor Classroom Employees Responsible for Planning and Managing Programs

In the running of Mitsubishi Electric Outdoor Classrooms, a lot of emphasis is placed on the employees “doing it for themselves.” The programs are planned by Group employees who have completed an Outdoor Classroom Leader Development Course, who serve as “Outdoor Classroom leaders.” The choice of fields, the ways in which nature is experienced, and the timing (season) of the classrooms are all at the discretion of these leaders. The leaders utilize the emotional experiences and discoveries gained through their development course and compile a program of their choice utilizing their own creativity. Mitsubishi Electric also involves the cooperation of local key persons, NPOs, and so on to ensure that our outdoor classrooms leave an even deeper impression on the participants. There are as many variations of the Outdoor Classroom as there are leaders.

Turning Fields near Business Sites into “Classrooms”

Outdoor classrooms are held in various locations, including mountains, forests, parks, seashores, rivers, rice fields and farms. The outdoor classroom leaders throughout Japan make the neighboring natural habitat their classroom. Occasionally, they may also use the grounds of the business site itself as a classroom. Each location has its own unique fauna, flora, sounds, and smells. Mitsubishi Electric Outdoor Classrooms provide an opportunity for children and adults alike to experience the workings of nature and make various discoveries through their own five senses.

“Biodiversity Observation by One Million People” Continued Despite the Pandemic

Activities that attract many participants were restricted in fiscal 2021, and as a result, the Mitsubishi Electric Outdoor Classroom was suspended. In its place, we hosted “Biodiversity Observation by One Million People,” a summer holiday program that invites children and parents to search for living creatures. Copies of a checklist including 30 species of living creatures that can be found across Japan during the summer were distributed to parent-child groups who wished to participate. With this checklist in hand, these families then went on a search for living creatures around their homes and during outings.

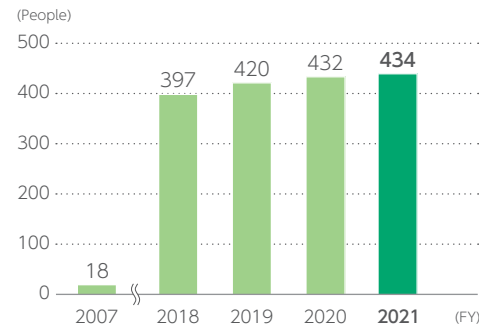
Objectives and Results

With the 9th Environmental Plan (fiscal 2019–2021), our objective was to continue the “Mitsubishi Electric Outdoor Classroom” and “Satoyama Woodland Preservation Project,” aiming to surpass the 51,000 mark in total participants by the end of fiscal 2021 by achieving an increase of 12,000 participants from March 2018. The number increased steadily and reached 47,808 people by the end of fiscal 2020, but in fiscal 2021, activities that attract a large number of people needed to be cancelled in some areas due to the COVID-19 pandemic. As a result, the total number of participants during the 9th Environmental Plan amounted to 48,872 people.

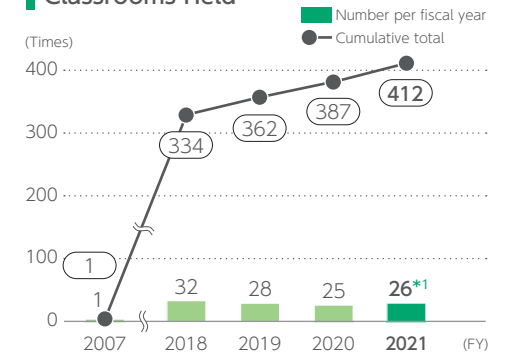
In fiscal 2022, we are planning to implement the abovementioned activities at all of our business sites in Japan (39 areas) with anti-coronavirus measures fully in place. We will continue

to interact with and contribute to local communities by holding the Satoyama Woodland Preservation Project and Mitsubishi Electric Outdoor Classroom in an integrated manner.

Result of Fostering Leaders for Outdoor Classroom (Cumulative Total)

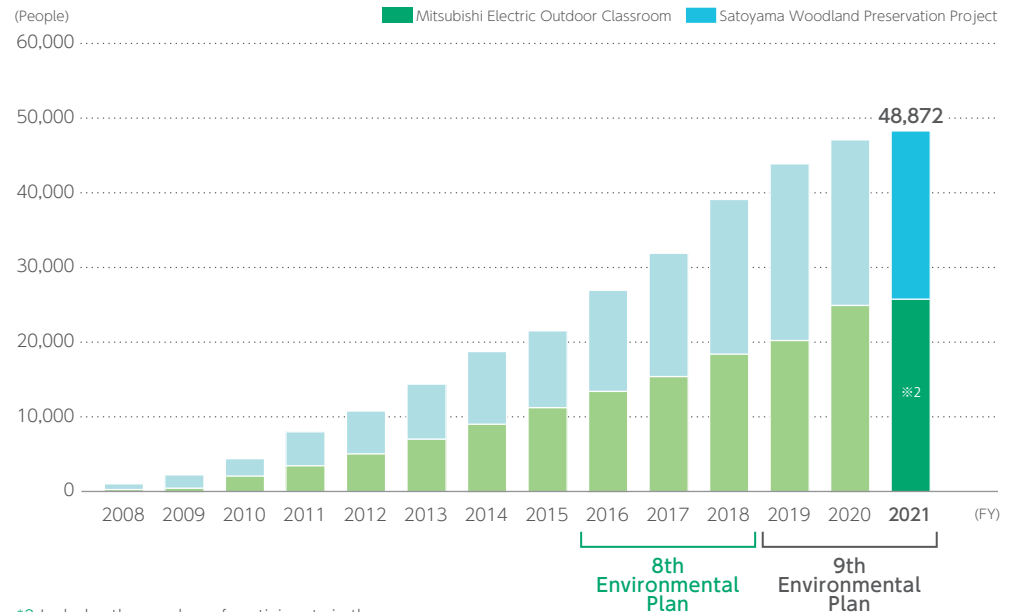


Numbers of Mitsubishi Electric Outdoor Classrooms Held



*1 Includes the number of times the “Biodiversity Observation by One Million People” program was held.

Total Number of Participants in the Mitsubishi Electric Outdoor Classroom and Satoyama Woodland Preservation Project (Results)



**2 Includes the number of participants in the “Biodiversity Observation by One Million People” program.

Environmental Data

Material Balance

Manufacturing (Input)

	FY 2019	FY 2020	FY 2021
■ Manufacturing			
Materials*1 (Weight of all products sold + Weight of packaging materials + Waste emissions)	2,820 kt	2,660 kt	2,420 kt
Total energy input*2	2,035 10,000GJ	1,957 10,000GJ	1,866 10,000GJ
Electricity	1,874 GWh	1,810 GWh	1,733 GWh
Traditional electric power	1,852 GWh	1,788 GWh	1,708 GWh
Electric power from renewable energy sources	22 GWh	22 GWh	25 GWh
City gas	39,910,000 m ³	37,180,000 m ³	34,890,000 m ³
LPG	3,674 tons	3,617 tons	3,725 tons
Oil (crude oil equivalent)	3,917 kl	3,806 kl	2,813 kl
Other greenhouse gases	8,237 tons	7,611 tons	6,720 tons
Water usage	15,410,000 m ³	15,710,000 m ³	14,890,000 m ³
Intake	10,900,000 m ³	11,060,000 m ³	10,350,000 m ³
Reuse	4,500,000 m ³	4,650,000 m ³	4,550,000 m ³
Chemical substances			
Controlled chemical substances (amounts handled)*3	4,231 tons	3,731 tons	3,727 tons
Volatile organic compounds	2,777 tons	2,664 tons	2,408 tons
Average reduction rates of resource inputs*4	42 %	42 %	43 %

*1 Total value for shipping weight of products, plus amount of product packaging materials used, plus total amount of waste.

*2 Includes electricity, city gas, LPG, oil, etc.

*3 Japan: Substances subject to Japan's PRTR law. Overseas: Controlled chemical substances designated by Mitsubishi Electric and used in amounts of 18 kg or more.

*4 Average reduction rates for 64 product groups (compared to fiscal 2001)

Manufacturing (Output)

	FY 2019	FY 2020	FY 2021
■ Products			
Weight of all products sold*5	2,390 kt	2,303 kt	2,111 kt
Weight of packaging materials*6	210 kt	149 kt	124 kt
Japan	63 kt	62 kt	56 kt
Overseas	150 kt	87 kt	68 kt
■ Emissions (from manufacturing)			
Emissions into the atmosphere			
Greenhouse gas emissions (CO ₂ -equivalent)	1,290 kt-CO ₂	1,236 kt-CO ₂	1,160 kt-CO ₂
CO ₂ *7	1,130 kt-CO ₂	1,086 kt-CO ₂	1,039 kt-CO ₂
Other greenhouse gases*8	160 kt-CO ₂	150 kt-CO ₂	121 kt-CO ₂
Chemical substances			
Controlled chemical substances*3	881 tons	791 tons	814 tons
Volatile organic compounds	999 tons	946 tons	792 tons
NOx	— tons	83 tons	25 tons
SOx	— tons	1.0 tons	1.0 tons
Discharge into water			
Water	8,580,000 m ³	8,640,000 m ³	8,160,000 m ³
Chemical substances			
Controlled chemical substances*3	8.0 tons	8.0 tons	8.0 tons
BOD	— tons	98 tons	101 tons
COD	— tons	131 tons	109 tons
■ Waste			
Emissions	212,752 tons	210,168 tons	187,137 tons
Non-hazardous waste	205,530 tons	197,560 tons	181,689 tons
Hazardous waste	7,222 tons	12,607 tons	5,448 tons
Waste treatment subcontracted out	112,196 tons	110,954 tons	101,605 tons
In-house weight reduction	457 tons	550 tons	757 tons
Amount recycled	172,767 tons	159,340 tons	147,258 tons
Final disposal	404 tons	311 tons	121 tons
Japan	4.8 tons	16 tons	28 tons
Overseas	399 tons	295 tons	93 tons
Final waste disposal ratio (Japan)	0.01 %	0.01 %	0.02 %
Final waste disposal ratio (Overseas)	0.5 %	0.4 %	0.2 %

*5 Shipping weight of products

*6 Total of disposable and returnable packaging materials

*7 Japan: 0.487 t-CO₂/MWh (figure published by the Federation of Electric Power Companies in 2013, when two nuclear power stations are in operation). Overseas: Calculated in reference to data published by the Japan Electrical Manufacturers' Association in 2006.

*8 Global Warming Potential (GWP) for greenhouse gases other than CO₂ is calculated in reference to data published in the IPCC 2nd Evaluation Report (1995).

Transporting (Input)

	FY 2019	FY 2020	FY 2021
■ Sales and Logistics*9			
Fuel for trucks (gasoline)	12,105 kl	12,240 kl	5,679 kl
Japan	11,994 kl	12,134 kl	5,675 kl
Overseas	111 kl	106 kl	4 kl
Fuel for trucks (diesel)	56,613 kl	55,640 kl	55,635 kl
Japan	32,049 kl	32,174 kl	41,969 kl
Overseas	24,564 kl	23,466 kl	13,666 kl
Fuel for rail (electricity)	1.6 GWh	1.8 GWh	1.4 GWh
Japan	1.6 GWh	1.8 GWh	1.4 GWh
Overseas	0.0 GWh	0.0 GWh	0.0 GWh
Fuel for marine transport (bunker oil)	73,488 kl	74,323 kl	60,037 kl
Japan	428 kl	454 kl	525 kl
Overseas	73,060 kl	73,869 kl	59,512 kl
Fuel for air transport (jet fuel)	807 kl	17,959 kl	20,833 kl
Japan	678 kl	624 kl	511 kl
Overseas	129 kl	17,335 kl	20,322 kl

*9 Figures for overseas affiliated companies include transportation between countries.

Transporting (Output)

	FY 2019	FY 2020	FY 2021
■ Emissions*10 *11			
CO₂	394 kt-CO ₂	435 kt-CO ₂	384 kt-CO ₂
Japan	116 kt-CO ₂	115 kt-CO ₂	124 kt-CO ₂
Overseas	278 kt-CO ₂	320 kt-CO ₂	260 kt-CO ₂

*10 Figures for overseas affiliated companies include transportation between countries.

*11 The sum of these figures and CO₂ emissions from procurement/logistics (0.1 t-CO₂) make up Scope 3 Category 4 emissions (see next page).

Using (Input)

	FY 2019	FY 2020	FY 2021
■ Energy Consumption			
Energy consumed during product use*12	76,400 GWh	74,800 GWh	75,800 GWh

*12 Energy consumed during product use: Total energy consumed (estimated value) when using 76 finished products targeted for CO₂ reduction. The length of use (operating time) is set for each product according to statutory useful life, designed service life, statistical values, etc.

Using (Output)

	FY 2019	FY 2020	FY 2021
■ Emissions			
Greenhouse gas emissions during product usage (CO₂-equivalent)	36,620 kt-CO ₂	35,870 kt-CO ₂	34,740 kt-CO ₂
CO ₂ *13	36,510 kt-CO ₂	35,740 kt-CO ₂	34,660 kt-CO ₂
SF ₆ *14	110 kt-CO ₂	130 kt-CO ₂	80 kt-CO ₂
Average reduction rate of CO₂ during product usage	36 %	37 %	36 %
Contribution to reducing CO₂ during product usage	77,000 kt-CO ₂	76,000 kt-CO ₂	74,000 kt-CO ₂

*13 Sum of CO₂ emitted when using 76 finished products targeted for CO₂ reduction. The amount of CO₂ emitted is equal to the energy consumed multiplied by the CO₂ emissions coefficient, for which the value shown in CO₂ Emissions from Fuel Combustion Highlights (2013 Edition) is used.

*14 Sum of SF₆ gas naturally leaked during the operation of products (6) that use SF₆ gas for insulation. Leakage rate used is the value from JEAC5001-2000. Global warming potential value used is from the 2nd Revised Guidelines of the IPCC.

Reducing Greenhouse Gases Emitted in the Value Chain

The “★” symbol denotes Mitsubishi Electric Group greenhouse gas emissions for which third-party verification has been carried out by SGS Japan Inc.

Scope	Accounting (kt) (Bottom row: Total emission ratio)			Accounting Summary*1
	FY 2019	FY 2020	FY 2021	
Scope 1: Direct emissions from fuel use and industrial processes at our company*2				
	★278 (0.6%)	★265 (0.6%)	★227 (0.5%)	
Scope 2: Indirect emissions associated with use of electricity and heat purchased by our company*3				
Market based	★981 (2.1%)	★853 (1.8%)	★812 (1.8%)	Calculated using the power emission coefficient based on the contract
Location based	★1,020	★982	★942	Calculated using the average emission coefficient of power generated in the area
Scope 3: Indirect emissions outside the scope of our company's operational activities*3				
Category 1 Purchased goods and services	★7,050 (15%)	★8,006 (17%)	★9,087 (20%)	Emissions associated with activities up to the manufacturing of materials, etc. relating to raw materials, parts, purchased products, and sales*4
Category 2 Capital goods	770 (1.7%)	672 (1.5%)	334 (0.7%)	Emissions generated by the construction and manufacturing of own capital goods
Category 3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	87 (0.2%)	83 (0.2%)	79 (0.2%)	Emissions associated with procurement of fuel necessary for power generation, heat supply, etc., and power such as electricity supplied by other parties
Category 4 Upstream transportation and distribution	400 (0.9%)	430 (0.9%)	386 (0.8%)	Emissions associated with logistic processes up to the delivery to our company of materials, etc. relating to raw materials, parts, purchased products, and sales*5
Category 5 Waste generated in operations	0.3 (0.0%)	0.4 (0.0%)	0.4 (0.0%)	Emissions associated with transporting and processing waste produced by our company*6
Category 6 Business travel	★39 (0.1%)	★31 (0.1%)	★4.6 (0.0%)	Emissions associated with employee business travel*7
Category 7 Employee commuting	★30 (0.1%)	★30 (0.1%)	★29 (0.1%)	Emissions associated with employees commuting to and from their respective workplaces*8
Category 8 Upstream leased assets	—	—	—	Emissions associated with operation of leased assets hired by our company (Calculated by Mitsubishi Electric under Scope 1 and Scope 2)
Category 9 Downstream transportation and distribution	6.0 (0.0%)	6.6 (0.0%)	6.4 (0.0%)	Emissions associated with the transportation, storage, cargo handling and retailing of products
Category 10 Processing of sold products	1.8 (0.0%)	2.0 (0.0%)	2.3 (0.0%)	Emissions associated with the processing of interim products by business operators
Category 11 Use of sold products	★36,450 (79%)	★35,865 (77%)	★34,737 (76%)	Emissions associated with the use of products by users (consumers/business operators)
Category 12 End-of-life treatment of sold products	30 (0.1%)	26 (0.1%)	31 (0.1%)	Emissions associated with the transportation and processing of products for disposal by users (consumers/business operators)*4
Category 13 Downstream leased assets	0.2 (0.0%)	0.2 (0.0%)	0.2 (0.0%)	Emissions associated with operation of leased assets
Category 14 Franchises	—	—	—	Emissions at companies operating as franchises (Not applicable to Mitsubishi Electric)
Category 15 Investments	73 (0.2%)	45 (0.1%)	38 (0.1%)	Emissions associated with operation of investments
Scope 3 total	44,937 (97%)	45,198 (98%)	44,735 (98%)	
Total	46,196 (100.0%)	46,316 (100.0%)	45,774 (100.0%)	

*1 Excerpt from Basic Guidelines published by the Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry
*2 CO₂, SF₆, HFCs, and PFCs emissions associated with the use of city gas, heavy oil, etc., and with product manufacturing
*3 CO₂ emissions associated with the use of electricity, etc. *4 Excludes some regions
*5 CO₂ emissions associated with product distribution/circulation (sales distribution) Subject to accounting: 55 companies (production sites)
*6 CO₂ emissions associated with transportation of waste (waste distribution) Subject to accounting: Mitsubishi Electric
*7 Results for Japan. Excludes CO₂ emissions associated with actual use of taxis and accommodation
*8 Assuming that all employees use passenger rail services

Amount of Water Intake/Drainage/Reuse

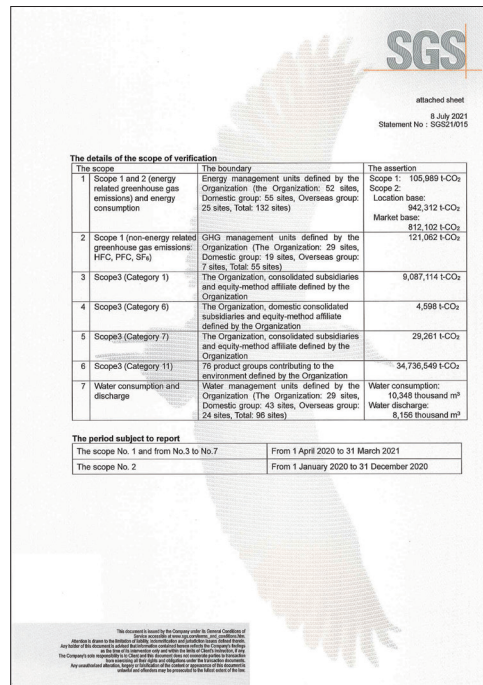
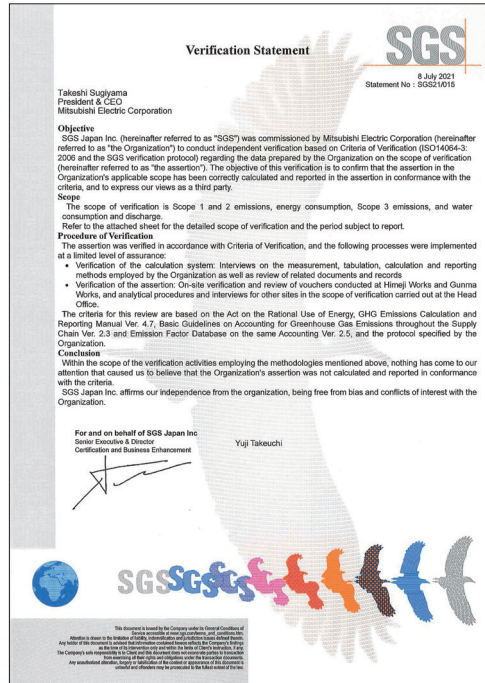
Unit: 10,000 m³

Item	Group	Japan*9	Overseas	Regional Breakdown				
				China	Southeast Asia	Europe	US	Latin America
FY 2021 results								
Water usage (water intake plus reuse)	1,489	1,317	172	74	87	2.8	4.8	4.3
Intake	1,035	876	159	64	83	2.6	4.8	4.2
Surface water	300	202	98	22	73	0.1	0.0	3.1
Groundwater	519	518	0.7	0.0	0.7	0.0	0.0	0.0
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged during development/mining processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water purchased from third parties	216	156	60	42	9.0	2.5	4.8	1.1
Drainage volume	816	707	109	50	49	1.2	4.8	3.5
Surface water	398	398	0.0	0.0	0.0	0.0	0.0	0.0
Groundwater	4.3	2.9	1.4	0.3	0.0	0.1	0.0	1.0
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged into third-party drainage facilities	413	306	107	50	49	1.0	4.8	2.5
Water reused	455	441	14	9.7	3.8	0.2	0.0	0.0
Water consumption (water intake minus drainage volume)	219	169	50	14	34	1.4	0.0	0.7
Reuse ratio (reused/used) (%)	31	33	8.0	13	4.3	7.1	0.0	0.9
Water usage per unit of sales (Water usage/sales) (m ³ /million yen)	3.55	—	—	—	—	—	—	—
FY 2020 results*10								
Water usage (water intake plus reuse)	1,571	1,366	205	84	108	4.0	5.2	3.9
Intake	1,106	912	193	77	104	3.4	5.2	3.9
Surface water	330	211	119	23	93	0.1	0.0	2.5
Groundwater	536	535	0.9	0.0	0.9	0.0	0.0	0.0
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged during development/mining processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water purchased from third parties	240	166	74	54	10	3.3	5.2	1.4
Drainage volume	864	731	132	65	58	1.3	5.2	3.0
Surface water	407	407	0.0	0.0	0.0	0.0	0.0	0.0
Groundwater	3.3	1.7	1.7	0.4	0.0	0.1	0.0	1.1
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged into third-party drainage facilities	453	323	131	65	58	1.2	5.2	1.9
Water reused	465	454	12	6.9	4.2	0.6	0.0	0.0
Water consumption (water intake minus drainage volume)	242	181	61	12	46	2.1	0.0	0.9
Reuse ratio (reused/used) (%)	30	33	5.7	8.2	3.9	14.8	0.0	1.1
Water usage per unit of sales (Water usage/sales) (m ³ /million yen)	3.52	—	—	—	—	—	—	—
FY 2019 results*10								
Water usage (water intake plus reuse)	1,541	1,328	212	85	112	2.1	8.2	4.2
Intake	1,090	888	203	81	107	2.1	8.2	4.2
Surface water	355	221	134	34	96	1.4	0.1	2.8
Groundwater	495	494	1.5	0.0	1.5	0.0	0.0	0.0
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged during development/mining processes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water purchased from third parties	240	173	67	46	10	0.7	8.1	1.3
Drainage volume	858	719	140	68	59	1.5	8.1	3.5
Surface water	383	383	0.0	0.0	0.0	0.0	0.0	0.0
Groundwater	1.4	0.2	1.2	0.9	0.0	0.0	0.0	0.3
Seawater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water discharged into third-party drainage facilities	474	335	139	67	59	1.5	8.1	3.2
Water reused	450	441	9.7	4.7	4.9	0.0	0.0	0.0
Water consumption (water intake minus drainage volume)	232	169	63	13	49	0.6	0.1	0.7
Reuse ratio (reused/used) (%)	29	33	4.5	5.5	4.4	0.0	0.0	0.9
Water usage per unit of sales (Water usage/sales) (m ³ /million yen)	3.41	—	—	—	—	—	—	—

*9 Sum of Mitsubishi Electric Corporation (non-consolidated) and affiliated companies in Japan.

*10 These figures have been altered in accordance with the new aggregation method.

Verification Statement



Environmental Accounting

Environmental Conservation Costs

Unit: 100 million yen

	FY 2019		FY 2020		FY 2021		Main Costs
	Capital Investment	Costs	Capital Investment	Costs	Capital Investment	Costs	
Business area activities	57	76	53	72	42	68	
Pollution prevention	2.9	16	1.8	14	2.6	14	Updating of processing facilities for emissions, sewage water, deodorization, etc.
Global environmental conservation	51	29	47	30	35	25	Updating of air conditioning equipment, switch to low fuel-consumption vehicles
Resource recycling	2.6	31	4.3	28	5.0	29	Consignment of the disposal of waste, construction of additional recycling facilities
Upstream and downstream production	0.0	2.1	0.1	2.1	0.0	1.9	Sewage expenses, reduction of the environmental impact of packaging
Management activities	1.6	34	1.0	33	0.8	16	Personnel expenses, employee education
R&D activities	1.0	62	2.3	84	0.9	39	improvement of energy/resources efficiency, designs to reduce size and weight
Community activities	0.0	0.3	0.0	1.1	0.0	0.5	Outdoor classrooms, Satoyama woodland preservation activities, cleaning and greening activities in the suburbs
Environmental damage countermeasures	0.0	0.5	0.2	0.3	0.0	0.2	Purification of contaminated soil/groundwater, measuring contamination levels
Total	60	175	57	192	44	126	

Environmental Conservation Benefits

Unit: 100 million yen

	FY 2019	FY 2020	FY 2021	Main Costs
Earnings	37	35	37	Profit on sale of valuable materials (mainly metals)
Savings	11	9.8	6.8	Results of energy savings, reuse of materials/water, and introduction of equipment to reduce the input of resources
Total	48	45	44	

Economic Benefits from Environmental Consideration in Products and Services (Estimated Benefits)

Unit: 100 million yen

	FY 2019	FY 2020	FY 2021	Main Costs
	10,099	11,184	10,845	Reduction of electricity bills as the result of improved energy efficiency of products*

* Baseline products correspond to products sold in fiscal 2001. Electricity rates are based on prices published in the Agency for Natural Resources and Energy's "Japan's Energy (2020 Edition)."

Comparison of Guidelines

GRI Standards In this report, only the "300: Environment" section is referenced.

Topics	Requirements	Reference Page (s)	Contents
Materials			
301-1	Materials used by weight or volume	P.34-35	Material Balance
301-2	Recycled input materials used	-	Data difficult to obtain
301-3	Reclaimed products and their packaging materials	-	Data difficult to obtain
Energy			
302-1	Energy consumption within the organization	P.34-35	Material Balance
302-2	Energy consumption outside of the organization	P.34-35	Material Balance
302-3	Energy intensity	-	Not calculated as of this time
302-4	Reduction of energy consumption	-	Data difficult to obtain
302-5	Reductions in energy requirements of products and services	-	Data difficult to obtain
Water and Effluents			
303-1	Interactions with water as a shared resource	P.23-24	Using Water Effectively
303-2	Management of water discharge-related impacts	P.23-24	Using Water Effectively
303-3	Water withdrawal	P.23-24	Using Water Effectively
		P.34-35	Material Balance
		P.36	Amount of Water Intake/Drainage/Reuse
303-4	Water discharge	P.23-24	Using Water Effectively
		P.34-35	Material Balance
		P.36	Amount of Water Intake/Drainage/Reuse
303-5	Water consumption	P.23-24	Using Water Effectively
		P.34-35	Material Balance
		P.36	Amount of Water Intake/Drainage/Reuse
Biodiversity			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	-	Not applicable
304-2	Significant impacts of activities, products, and services on biodiversity	-	The Mitsubishi Electric Group conducts no mining, cultivation or manufacturing of raw materials, and does not destroy woodlands or eco-systems. There has been no large impact due to production bases identified, neither in scale nor frequency.
304-3	Habitats protected or restored	Website	Preserving biodiversity at business sites (in Japanese only) https://www.mitsubishielectric.co.jp/corporate/environment/naturalsymbiosis/biodiversity_preservation/index.html
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Website	Living Creatures Research Report (in Japanese only) https://www.mitsubishielectric.co.jp/corporate/environment/naturalsymbiosis/report/index.html
Emissions			
305-1	Direct (Scope 1) GHG emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
305-2	Energy indirect (Scope 2) GHG emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
305-3	Other indirect (Scope 3) GHG emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
305-4	GHG emissions intensity	-	Not calculated as of this time
305-5	Reduction of GHG emissions	P.20-21	Reducing CO ₂ from Production
305-6	Emissions of ozone-depleting substances (ODS)	P.34-35	Material Balance
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	P.34-35	Material Balance
Waste			
306-1	Waste generation and significant waste-related impacts	P.22	Reducing Final Waste Disposal Ratios
		P.34-35	Material Balance
		P.22	Reducing Final Waste Disposal Ratios
306-2	Management of significant waste-related impacts	P.13	Preventing Environmental Incidents
		Website	PCB-related information (in Japanese only) https://www.mitsubishielectric.co.jp/corporate/environment/disclosure/pcb/index.html
		P.34-35	Material Balance
306-3	Waste generated	P.22	Reducing Final Waste Disposal Ratios
306-4	Waste diverted from disposal	P.34-35	Material Balance
306-5	Waste directed to disposal	P.34-35	Material Balance
Environmental Compliance			
307-1	Non-compliance with environmental laws and regulations	-	None
Supplier Environmental Assessment			
308-1	New suppliers that were screened using environmental criteria	-	Restricted by confidentiality obligations
308-2	Negative environmental impacts in the supply chain and actions taken	-	Mitsubishi Electric Corporation is committed to reducing environmental risk by recognizing suppliers who have met specific criteria in terms of environmental management system certifications acquired, the compliance of laws and regulations and other conditions.

TCFD Recommended Disclosures

Governance: Disclose the organization's governance around climate-related risks and opportunities.		
a) Describe the board's oversight of climate-related risks and opportunities.	P.10	Management System
b) Describe management's role in assessing and managing climate-related risks and opportunities.	P.10	Management System
Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning where such information is material.		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	P.8	Climate-Related Risks and Responses by the Mitsubishi Electric Group
	P.9	Examples of Climate-Related Opportunities and Initiatives by the Mitsubishi Electric Group
b) Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	P.7	Strategy
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	P.7	Strategy
Risk Management: Disclose how the organization identifies, assesses, and manages climate-related risks.		
a) Describe the organization's processes for identifying and assessing climate-related risks.	P.10	Identifying, Evaluating, and Managing Risks and Opportunities and Incorporating Them into Business Activities
b) Describe the organization's processes for managing climate-related risks.	P.10	Identifying, Evaluating, and Managing Risks and Opportunities and Incorporating Them into Business Activities
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	P.10	Identifying, Evaluating, and Managing Risks and Opportunities and Incorporating Them into Business Activities
Metrics and Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.		
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	P.8	Overview of Risk and Opportunity Assessment through Scenario Analysis
b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	P.11	Climate Change Indicators and Goals
	P.34	Environmental Data

Japan MOE Guideline

Item to Be Reported	Reference Page (s)	Contents
1. Basic information of environmental reporting		
1. Basic requirements for environmental reporting		
Boundary of the reporting entity	P.1	About This Report
Reporting period for information provided	P.1	About This Report
Reporting standards, guidelines or the like	P.1	About This Report
Overview of the environmental report	—	—
2. Trends in key performance indicators		
Trends in major performance indicators	P.34-37	Environmental Data
2. Items to be reported in environmental reporting		
1. Top management's commitments		
Top management's commitments on the entity's response to material environmental issues	—	—
2. Governance		
The entity's governance structure	P.10	Management System
Name of the manager responsible for material environmental issues	P.10	Management System
The roles of the board of directors and the board of executive officers in the management of material environmental issues	P.10	Management System
3. Stakeholder engagement		
Corporate policies to stakeholders	—	—
Overview of stakeholder engagement activities conducted in the reporting period	—	—
4. Risk management		
Environment-related risk identification, assessment, and management processes	P.10	Management System
Positioning of the above processes within the entity's overall risk management	—	—
5. Business model		
The entity's business model	—	—
6. Value chain management		
Value chain overview	P.18-29	Environmental Considerations for Value Chain Management
Green procurement policy, objectives, and results	P.19	Reducing Environmental Risk through Operation of the Green Accreditation System
Status of eco-friendly products and services	P.18	Implementation of Environmentally Conscious Design
	P.27-28	Contribution to Reducing CO ₂ from Product Usage
7. Long-term vision		
Long-term vision	P.2-3	Environmental Sustainability Vision 2050
Time period covered by the long-term vision	P.2-3	Environmental Sustainability Vision 2050
Reasons why that time period was selected	—	—
8. Strategy		
Business strategy of an entity developed for contributing to the achievement of a sustainable society	P.2-3	Environmental Sustainability Vision 2050
9. Methodology for identifying material environmental issues		
Procedure by which the entity identified its material environmental issues	—	—
List of identified material environmental issues	—	—
Reasons that the identified environmental issues were judged material	—	—
Boundaries of the material environmental issues	—	—
10. The entity's material environmental issues		
Policies and/or action plans	P.5-6	Initiatives to Realize a Decarbonized Society, Examples of Initiatives to Realize a Decarbonized Society
	P.16-17	Environmental Plan 2023
	P.40	Biodiversity Action Guidelines
Targets and results of policies / action plans based on performance indicators	P.15	Overview of the 9th Environmental Plan
	P.16-17	Environmental Plan 2023
	P.20-21	Reducing CO ₂ from Production
Methodologies used for calculating each performance indicator	P.27-28	Contribution to Reducing CO ₂ from Product Usage
	P.23-24	Reducing Water Usage
Aggregation scope of data for each performance indicator	P.1	About This Report
Financial impact of related risks and opportunities and calculation methodology thereof, if the financial impact is significant	—	—
An assurance report, if an independent third party provided assurance to the items to be reported	P.37	Verification Statement

Item to Be Reported	Reference Page (s)	Contents
Reference: Major environmental issues and their performance indicators		
1. Climate change		
Greenhouse gas emissions		
Scope 1 emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
Scope 2 emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
Scope 3 emissions	P.36	Reducing Greenhouse Gases Emitted in the Value Chain
Emission intensity		
Greenhouse gas emission intensity	—	—
Energy usage		
Breakdown of energy usage and overall energy usage	P.34-35	Material Balance
Renewable energy usage as a percentage of overall energy usage	P.34-35	Material Balance
2. Water resources		
Water resource inputs	P.23-24	Reducing Water Usage
	P.34-35	Material Balance
Water intensity	P.36	Amount of Water Intake/Drainage/Reuse
	P.23-24	Reducing Water Usage
Water discharge	P.36	Amount of Water Intake/Drainage/Reuse
	P.23-24	Reducing Water Usage
Status of water stress, if the entity has sites or supply chains located in areas with water stress	P.34-35	Material Balance
	P.36	Amount of Water Intake/Drainage/Reuse
—	—	—
3. Biodiversity		
Impact of business activities on biodiversity	P.30-32	Biodiversity Preservation Activities
Status and extent of the dependency of the entity's business activities on biodiversity	P.30-32	Biodiversity Preservation Activities
Business activities that contribute to biodiversity conservation	P.30-33	Biodiversity Preservation Activities
Status of cooperation with external stakeholders	—	—
4. Resource circulation		
Resource inputs		
Volume of nonrenewable resource inputs	—	—
Volume of renewable resource inputs	—	—
Volume of recycled materials used	P.23-24	Reducing Water Usage
	P.36	Amount of Water Intake/Drainage/Reuse
Rate of recycled and reused resources (= Volume of recycled materials used / Volume of resource inputs)	P.23-24	Reducing Water Usage
	P.36	Amount of Water Intake/Drainage/Reuse
Resource waste		
Total production of waste, etc.	P.22	Reducing Final Waste Disposal Ratios
	P.34-35	Material Balance
Total final disposal volume of waste, etc.	P.22	Reducing Final Waste Disposal Ratios
	P.34-35	Material Balance
5. Chemical substances		
Volume of chemical substances in storage	—	—
Volume of chemical substance emissions	P.25	Managing Chemical Substances
	P.34-35	Material Balance
Volume of chemical substances transferred	P.25	Managing Chemical Substances
	P.34-35	Material Balance
Volume of chemical substances handled (volume used)	P.25	Managing Chemical Substances
	P.34-35	Material Balance
6. Pollution prevention		
General		
Status of legal compliance	P.13	Preventing Environmental Incidents
Air quality conservation		
Air-pollutant emissions volume, emission concentration in air pollution regulations	P.34-35	Material Balance
Water pollution		
Water pollution load, emission concentration in emissions regulations	P.34-35	Material Balance
Soil pollution		
Status of soil pollution	P.13	Preventing Environmental Incidents

Policy/Communication

Mitsubishi Electric Group Environmental Policy

Based on its Purpose, “We, the Mitsubishi Electric Group, will contribute to the realization of a vibrant and sustainable society through continuous technological innovation and ceaseless creativity,” the Mitsubishi Electric Group is committed to realizing an affluent society that achieves both sustainability and safe, secure, and comfortable lifestyles. In particular, finding solutions to environmental problems such as climate change, resource depletion, and the loss of biodiversity is positioned as one of the most important issues that the Group must address as it strives to create new value and contribute to the realization of a sustainable future.

Utilizing our accumulated and newly developed state-of-the-art technologies, we will draw on strengths of a wide variety of businesses, both within and outside of the Group, to provide products and services that contribute to resolving climate change issues and creating a recycling-based society. At the same time, we will strive to create innovations and propose new values that support future generations. We are also working to minimize the impact of our business activities on the global environment and to preserve biodiversity by reducing greenhouse gas emissions and promoting the recycling of resources.

As a good corporate citizen, we will work with our employees, their families, and local communities to foster environmental awareness and expand the sphere of our activities that contribute to society. We will actively disseminate information on our environmental initiatives in the effort to promote a mutual understanding with society. Based on the recognition that laws represent the minimum social norms, we will not only comply with laws, but also develop a keen sensitivity to changes in society, and always conduct business activities giving appropriate consideration for the environment.

Under the Environmental Declaration, “Protect the air, land, and water with our hearts and technologies to sustain a better future for all,” all employees of the Mitsubishi Electric Group will contribute with pride and passion to enrich lives and improve the global environment.

January 2021

T. Sugiyama
Takeshi Sugiyama
 President & CEO

Biodiversity Action Guidelines

The Earth’s ecosystem is made up of diverse living organisms. All aspects of human civilization benefit from this ecosystem, but at the same time, we affect it in both direct and indirect ways. Today, damage to the ecosystem is said to be driving many species to extinction and otherwise eroding biodiversity.

In recognition of this, the Mitsubishi Electric Group has established Biodiversity Action Guidelines, which add the perspective of biodiversity as a means for living in harmony with nature to the Group’s conventional measures against climate change and environmental activities aimed at achieving resource recycling. These guidelines define the role of business activities in preserving biodiversity, and outline the Group’s efforts toward the development of a sustainable society through its business activities.

Resources & Procurement

Recognizing that we utilize globally procured natural resources such as minerals, fuels and plants, we shall aim to preserve biodiversity in Japan and around the world by carrying out green procurement activities.

Product Design

In designing our products and services, we shall promote the effective utilization of resources and the efficient use of energy, as well as aim to prevent the emission of substances that pose a risk to the environment.

Manufacturing & Transportation

When commencing or making changes to land use, such as when constructing factories or warehouses, we will give due consideration to protecting the biodiversity of the land in question. In manufacturing and transportation, we aim to minimize energy use, waste generation and the emission of chemical substances.

Sales, Usage & Maintenance

In our sales activities, we will work to promote better understanding among our customers of the impact that product/service usage and maintenance can have on biodiversity.

Collection & Recycling

We will actively develop recycling technologies and apply them to collected end-of-life products.

Understanding & Action

We will deepen our understanding of the importance of biodiversity and our relationship to it, and will actively and voluntarily take actions necessary to coexist in harmony with nature.

Cooperation

All companies in the Mitsubishi Electric Group, including overseas affiliates, will act as one, in cooperation with local communities, NGOs and governments.

Environmental Communication

In fiscal 2022, Mitsubishi Electric set up a new unit named the Corporate Communication Group to be directly supervised by our President. Our aim is to contribute to achieving sustainability through the entirety of the Mitsubishi Electric Group's activities, as well as to strengthen strategic communications in order to improve brand value and enhance stakeholder engagement. The new organization is responsible for the central management of sustainability planning and related promotion, public relations and advertising functions. We will continue to widely publicize the details of the Mitsubishi Electric Group's environmental efforts through information media, including websites, social media networks and showrooms, as well as environmental events and exhibitions held in Japan and overseas.

1. Information disclosure in line with TCFD recommendations

Mitsubishi Electric has expressed approval of the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD), based on which it discloses climate change-related information.

→For the details of information disclosure in line with the TCFD recommendations, please refer to "Financial Information Based on Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)" on page 7.

2. Response to research institutions

Mitsubishi Electric actively responds to requests by research institutions and media agencies to take part in surveys relating to environmental initiatives, providing answers with various data and initiatives in the value chain.

3. Participation in industry groups

Mitsubishi Electric takes action toward solving environmental issues and communicates its opinions through participation in the Japan Business Federation and electrical machinery/electronics industry groups.

4. Regional communication

Mitsubishi Electric hosts the Satoyama Woodland Preservation Project and Mitsubishi Electric Outdoor Classrooms. Through these programs, we make ongoing efforts to develop personnel who contemplate what is necessary to preserve nature and then take action themselves by getting in touch with and experiencing nature.

Sustainability

<https://www.mitsubishielectric.com/en/sustainability/index.html>



Environmental Report 2021

<https://www.MitsubishiElectric.com/en/sustainability/environment/report/index.html>



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