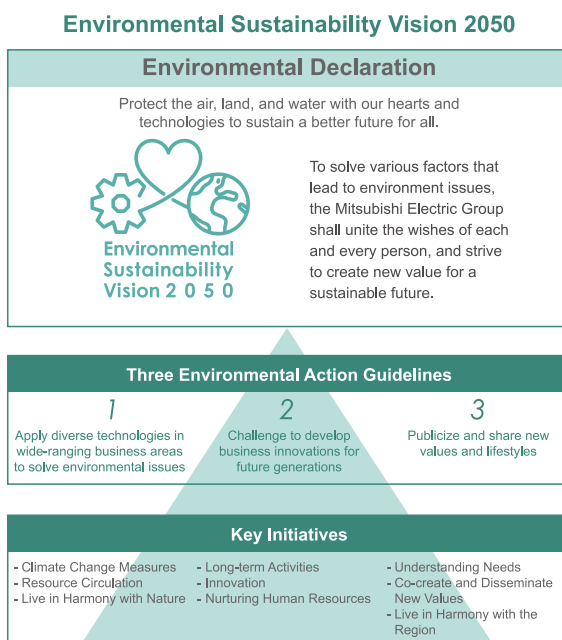


Environment

Environmental Sustainability Vision 2050

In recent years, corporations are expected to further continue their long-term 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.



[web](#) Environmental Sustainability Vision 2050

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

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), and as such, the Group promotes efforts and discloses information in line with these recommendations.

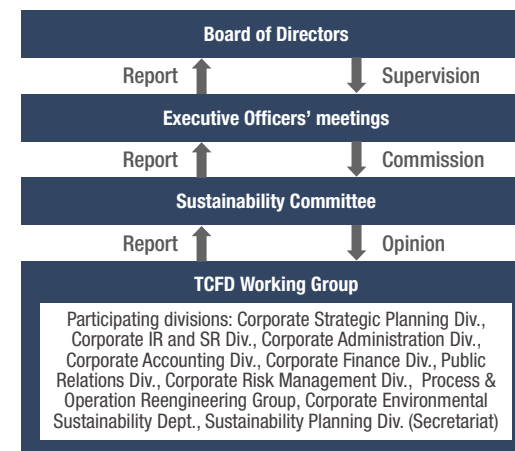
We view response to the TCFD as an activity to fulfill our “responsibility to a sustainable society” and “contribute to a sustainable society through our business” by addressing the global environmental challenge posed by climate change. Moreover, we view it as “risk management in response to long-term social and environmental changes” towards the realization of sustainability, and “communication with stakeholders” to promote the resolution of social issues.

Governance

TCFD Working Group

During fiscal 2023, the TCFD Working Group was established under the auspices of the Sustainability Committee with the aim of stepping up efforts to address risks and opportunities associated with climate change, both in terms of “risk management in response to long-term social and environmental changes” and “communication with stakeholders.”

As a point of reinforcement, the project considered the financial impact assessment based on scenario analysis and the global environmental risks management in the risk management of the Mitsubishi Electric Group.



TCFD Working Group

Considering the financial impact assessment based on scenario analysis

We have identified and extracted the corporate divisions that are considered to be relatively highly sensitive to the impacts of climate change by examining the following documents and records as well as assessing them from a bird's-eye view: external assessments (ESG investment guidelines, various climate-related initiatives, etc.) of the magnitude and sensitivity of the effects that climate change has on industries; greenhouse gas emission amounts by division; and the business portfolio of each corporate division. We next estimated the financial impacts on our current business plans over the long-term in an uncertain future year based on the assumption of scenarios in which climate change is below 2°C and in which climate change is 4°C. We then verified the resilience of these businesses and examined the degree of impacts on the Mitsubishi Electric Group's overall business as well as the accuracy and validity of the information disclosed. In fiscal 2024, with the aim of conducting a financial impact assessment of the Mitsubishi Electric Group as a whole and disclosing the results in fiscal 2025, we will continue this study and expand it into a consistent analysis of all corporate divisions.

Examination of global environmental risk management in the risk management of the Mitsubishi Electric Group

With regard to risk management, we have established a risk management framework for the Mitsubishi Electric Group, positioned global environmental risks including climate change within this framework, and improved management processes for risks related to the global environment. In fiscal 2024, we aim to further contribute to the global environment by deepening and clarifying the identification, assessment, and management of risks and opportunities related to climate change.

Strategy

Climate Change Risks and Opportunities in the Short, Mid-to-Long Term

The Mitsubishi Electric Group has identified climate-related risks and opportunities.

Table 1 Examples of Climate-related Risks and Initiatives 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 GHG¹ emissions through promotion of environmental plans and setting and taking initiative on SBT² ● 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 (Mid-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 key growth businesses ● Capital investment related to environmental activities, including energy saving and global warming countermeasures
Market Risks (Mid-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 (Mid-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) <ul style="list-style-type: none"> ● Increased severity of extreme weather such as cyclones and floods 	<ul style="list-style-type: none"> ● Formulation and periodic review of BCPs³ ● Implementation of supply chain management (formulation and implementation of green procurement standards, decentralization of production sites by purchasing from multiple companies, etc.)
Chronic Risks (Mid-to-Long Term) <ul style="list-style-type: none"> ● 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

*1 Greenhouse gas *2 Science Based Targets *3 Business continuity plan

Table 2 Examples of Climate change-related Opportunities and Initiatives by the Mitsubishi Electric Group

Social Challenges (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 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 ● Verification of plastic sorting technology in collaboration with other companies, joining the alliance "CLOMA"^{*1} ● Energy conservation and reduction of operation costs for buildings as a whole through ZEB (net Zero Energy Building), etc. ● Development of Ville-feuille^{®2} and other linked control technologies for mobility and building equipment ● 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 ● Strengthening of products and solutions that support e-F@ctory³ ● Promotion of a modal shift ● Localization of production and sales bases
■ Energy Source	
<ul style="list-style-type: none"> ● Use energy sources that contribute to carbon neutrality ● 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 - VSC-based high-voltage direct current systems "HVDC-Diamond"^{®4} - Smart medium voltage DC distribution network system D-SMiree⁵ - Distributed power supply system/VPP system - Multi-region digital power supply system (multi-region EMS)⁶ - Heat pump technology⁶
■ Products and Services	
<ul style="list-style-type: none"> ● Development and/or expansion of goods and services that contribute to carbon neutrality ● 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,⁷ a lighting fixture that imitates a deep blue sky and natural light in indoor spaces. ● Development for further improving energy efficiency of railway vehicles and Railway LMS on INFOPRISM⁸, a solution for streamlining maintenance ● Demonstration of ZEB-related technologies, including the construction of demonstration facilities ● Development and supply of the EcoMBR⁹ 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 ● Centralized GHG emissions data management solution "cocono"¹⁰ ● 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 prevention¹¹ ● 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 Contributing to Solving the Marine Plastic Waste Problems "Joining CLOMA"

*7 "misola" blue sky lighting <Japanese site>

*2 Smart city/building IoT platform "Ville-feuille"[®] <Japanese site>

*8 Topics: Solution that supports safe, secure, and efficient railway operations

*3 Introduction of e-F@ctory

*9 Water treatment technology using membrane bioreactor with ozonated water <Japanese site>

*4 Topics: VSC-based high-voltage direct current systems "HVDC-Diamond"[®]

*10 Centralized GHG emissions data management solution "cocono" <Japanese site>

*5 Energy & Industrial Systems Group

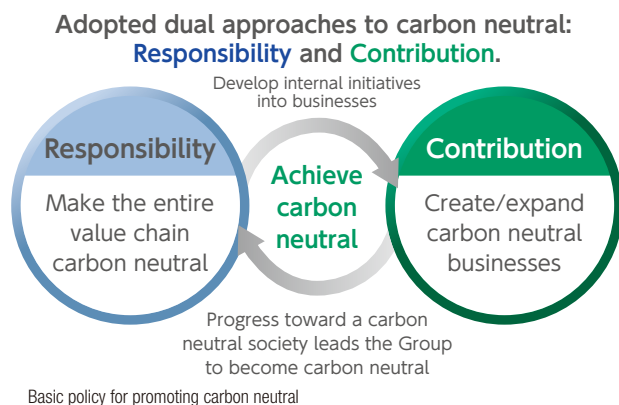
*11 Observation Satellites

*6 Topics: "ecodan" series

Promotion of carbon neutrality

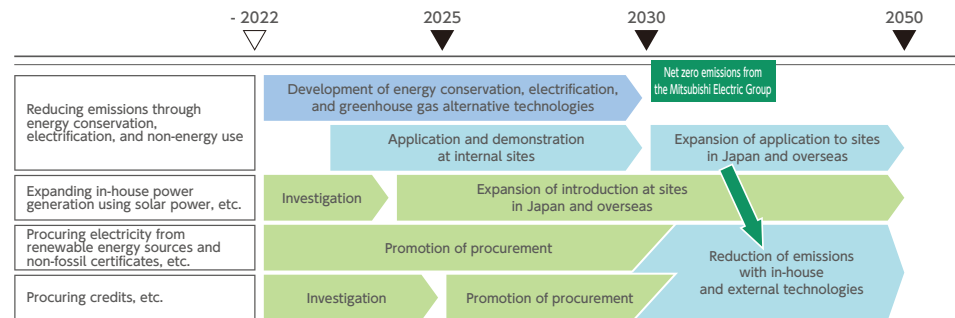
The Mitsubishi Electric Group is working to achieve carbon neutrality from the aspects of responsibility and contribution. While continuing and growing our business, we aim to achieve net zero greenhouse gas emissions from our own operations and to achieve carbon neutrality throughout our value chain by 2050. In May 2022, we announced an interim target of “reducing our own emissions to 50% of the fiscal 2014 level by fiscal 2031,” and in May 2023, we changed the interim target to “aiming for net zero greenhouse gas emissions from factories and offices by fiscal 2031” to proactively join in the international trend to limit the increase in global average temperature to 1.5°C or less. In Japan, we also participate in the GX League, a collaboration between industry, government, academia, and private citizens to achieve carbon neutrality by 2050, which is led by the Ministry of Economy, Trade and Industry (METI).

We will apply our internal initiatives to our business and return the positive impacts on the Mitsubishi Electric Group resulting from progress made in these initiatives throughout society to our business. In this way, we will work to achieve carbon neutrality by mutually reinforcing each other’s efforts.



Responsibility: Carbon neutral initiatives in the entire value chain

The Mitsubishi Electric Group has set out to achieve net zero greenhouse gas emissions in the entire value chain by 2050. As initiatives to reduce such emissions at factories and offices, we aim to achieve net zero greenhouse gas emissions from factories and offices by fiscal 2031 by (1) reducing emissions through energy conservation, electrification, and non-energy use; (2) expanding in-house power generation using solar power, etc.; (3) procuring electricity from renewable energy sources and non-fossil certificates, etc.; and (4) procuring credits, etc.

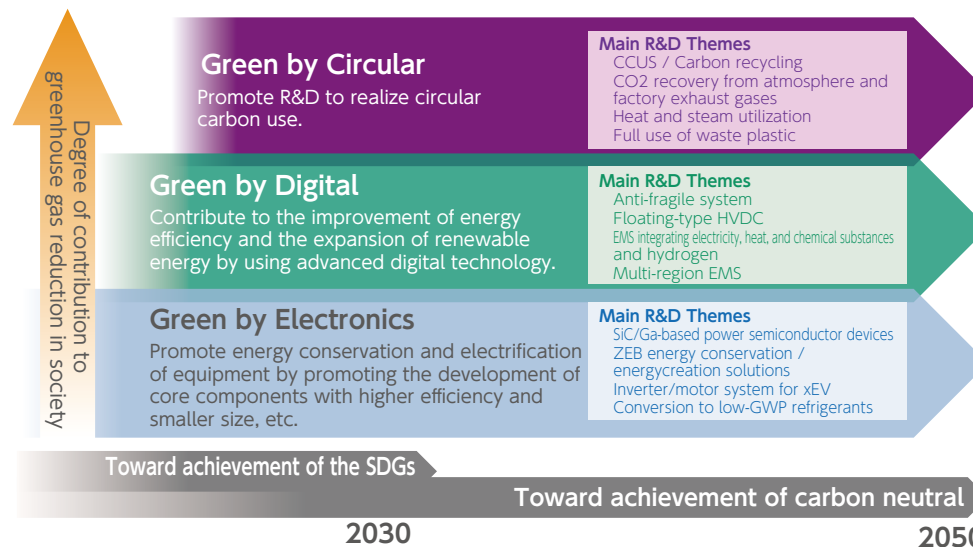


Roadmap for reducing emissions from factories and offices

Contribution: Create/expand businesses that contribute to carbon neutral

To make society as a whole carbon neutral, we have established a development roadmap up to 2050 and will accelerate R&D in three innovation areas: Green by Electronics, Green by Digital, and Green by Circular.

As an example of our efforts, we have established the Mitsubishi Electric Energy & Carbon Management Collaborative Research Center with Tokyo Institute of Technology to promote research and development of energy and carbon management technologies, including environmental value trading of electricity, heat, and chemical substances as well as carbon recycling technologies.



CCUS(Carbon dioxide Capture, Utilization and Storage), HVDC(High Voltage Direct Current), EMS(Energy Management System), ZEB(net Zero Energy Building), GWP(Global Warming Potential)

Development roadmap for achieving carbon neutral

Risk Management

Processes for addressing climate change-related risks and opportunities

The Mitsubishi Electric Group uses a business strategy decision-making process and a comprehensive risk management process to identify, assess, and manage risks and opportunities related to the global environment, including climate change.

Each of Mitsubishi Electric's department (business groups, corporate divisions), and affiliated companies in Japan and overseas will identify climate change-related risks that are relevant to them, consider how to respond to such risks and turn them into opportunities, and proactively incorporate them into their business and divisional strategies. The CSO (Chief Strategy Officer) will also formulate an overall management strategy for the Mitsubishi Electric Group based on the formulated business and divisional strategies, the policies for seizing opportunities related to climate change, the return on investment of measures to achieve carbon neutrality, and the carbon costs estimated by ICP (Internal Carbon Pricing).

At the same time, as part of the Mitsubishi Electric Group's comprehensive risk management, we will identify, assess, and properly manage issues that have significant impacts on management in various risk areas, including risk management related to climate change.

Mitsubishi Electric Group risk management system and positioning of global environmental risks

The Mitsubishi Electric Group's global environmental and other risks, including risks related to climate change, are primarily managed by each corporate division of Mitsubishi Electric and its subsidiaries and affiliates in Japan and overseas. In addition, under the direction of the Chief Risk Management Officer (CRO), the corporate division (i.e., the division in charge of the risk) identifies, assesses, and manages risks based on its knowledge in each area of expertise.

Risks in each specialty area identified and assessed by the divisions in charge of such risks are consolidated by the Corporate Risk Management Division, and their impacts on group management are evaluated through relative comparisons among each risk, etc. The CRO determines their materiality, and all Executive Officers discuss the risks (comprehensive evaluation of risks/measures).

Risks comprehensively assessed through the above process are shared with relevant parties, including management. The Group considers global environmental risks, including climate change, to be highly material because they have significant impacts on the realization of a sustainable global environment, one of the Group's materialities.

Management process for risks related to the global environment

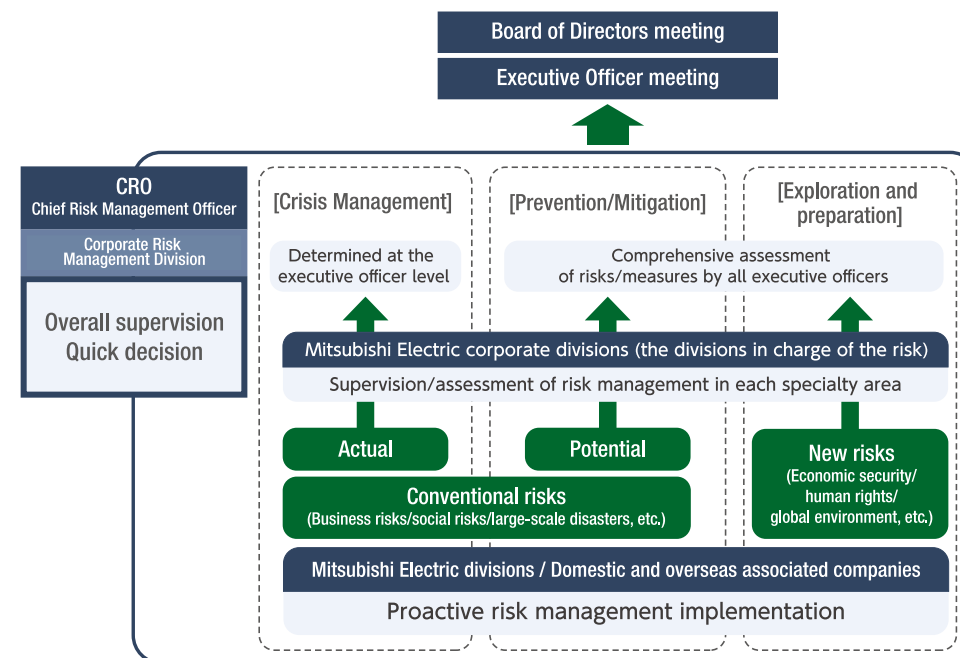
Global environmental risks, including climate change, are identified, assessed, and managed by the Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs and the Corporate Environmental Sustainability Department, the department in charge of risk, under the direction of the CRO, in accordance with the Mitsubishi Electric Group risk management system described above.

Based on the results of such comprehensive risk assessment, the Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs and the Corporate Environmental Sustainability Department identify and assess risks by subdividing global environmental risks into smaller risks, taking into account legal trends, technological trends, market trends,

external evaluations, and other factors. Based on the results, the Executive Officer and the Department formulate an environmental plan as a medium-term risk management measure and an environmental implementation plan as a one-year measure.

Each group organization (business groups, affiliated company, etc.) formulates its own annual environmental implementation plan based on these plans and reports the results to the Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs and the Corporate Environmental Sustainability Department.

The Executive Officer in charge of Corporate Total Productivity Management & Environmental Programs and the Corporate Environmental Sustainability Department then review the results of the identifying and assessing of global environmental risks, taking into account the results of each organization and social trends, and in turn report the results to the Corporate Risk Management Division and, if necessary, revise the environmental plan and reflect the results in the environmental implementation plan for the following fiscal year.



Risk Management Framework

Indicators and Targets

Calculating and Understanding Greenhouse Gas Emissions in the Value Chain

The Mitsubishi Electric Group calculates and tracks greenhouse gas emissions (Scope 1, 2 and 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.

Long-Term Target

In our long-term environmental management vision up to 2050, the so-called Environmental Sustainability Vision 2050, the Mitsubishi Electric Group has set a target to reduce greenhouse gas emissions throughout the entire value chain to net-zero by 2050.

Mid-Term Targets

The Mitsubishi Electric Group has reviewed its Scope 1 and Scope 2 targets in order to strengthen its efforts towards reducing greenhouse gas emissions, and it has set a new target during fiscal 2024 of “Achieving net zero greenhouse gas emissions from factories and offices by fiscal 2031.”

In addition, the following greenhouse gas emission reduction targets were approved by the Science Based Targets initiative in January 2020.

- Scope 1 and 2: Reduce greenhouse gas emissions by 18% by 2030 compared to fiscal 2017 levels
- Scope 3* : Reduce greenhouse gas emissions by 15% by 2030 compared to fiscal 2019 levels

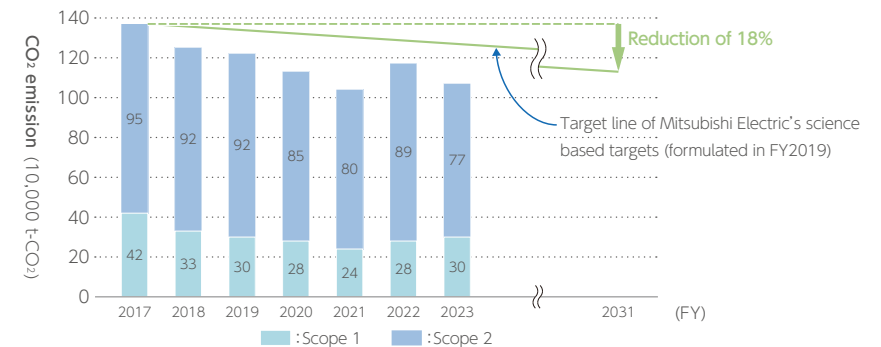
* Scope 3 emissions cover Category 11 (Use of sold products)

Short-Term Targets

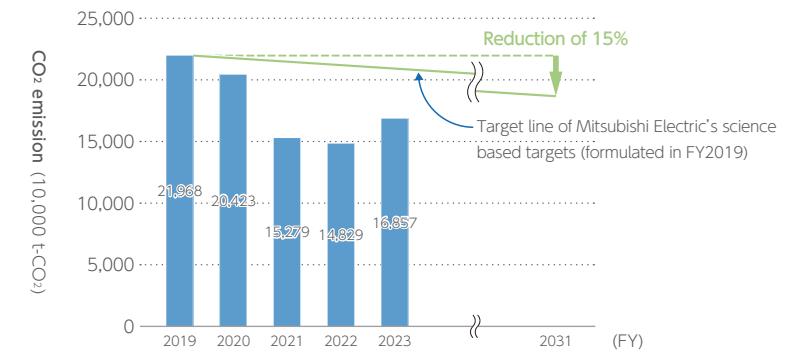
Since fiscal 1994, the Mitsubishi Electric Group has formulated an Environmental Plan every three years that sets out specific activity targets. We are presently pursuing various activities in line with the current Environmental Plan 2023 (fiscal 2022 to 2024) which sets out indicators and targets in four areas based on the action guidelines of the Environmental Sustainability Vision 2050, namely: “environmental contribution through products and services,” “reducing the environmental impact of business activities,” “pursuing business innovations,” and “publicizing and sharing new values and lifestyles.”

Progress

Initiatives to achieve greenhouse gas emission reduction targets are making steady progress.



Scope 1 and 2 emissions** (Mitsubishi Electric Group)



Scope 3 emissions** (Mitsubishi Electric Group)

*1 Scope 2 is location based. The CO₂ emission coefficient for electricity is calculated in reference to the following: Japan—the latest figures published by The Electric Power Council for a Low Carbon Society (ELCS); Overseas—the latest figures published by International Energy Agency. The global warming potential for greenhouse gases is calculated in reference to figures published in the IPCC Fifth Evaluation Report.

*2 The scope of third-party verification for Scope 3 emissions includes Category 11 (Use of sold products).

Third-party Verification

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

* The scope of third-party verification for Scope 3 emissions includes Category 1 (Purchased goods and services), Category 6 (Business travel), Category 7 (Employee commuting), and Category 11 (Use of sold products).

For details, see “Third-party Verification Report (Environmental Disclosure of 5 items)”

[Third-party Verification Report \(Environmental Disclosure of 5 items\)](#)