# 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.

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**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.

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**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 |
| | | Increase in usage rate of renewable energy sources | 2% or more in fiscal 2024 |
| | Improving the effective usage rate of plastic waste | 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 $CO_2$ Emission Targets in Annual Plans and Formulating Measures

Business groups in charge of production works formulate $CO_2$ emission reduction plans and measures as part of their annual business plans. Based on these plans, they strive to reduce their $CO_2$ 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.