

Initiatives towards Environment

Mabuchi Motor has established the "Mabuchi Group Environmental Policy" and is committed not only to producing environmentally friendly products but also to reducing environmental impact throughout the entire supply chain, from development and design to production processes and distribution, so that our corporate activities do not sacrifice the global environment and people's health.

Mabuchi Group Environmental Policy

We aim for the sustainable society by carrying out our corporate activities without sacrificing global environment and human health, and by striving for continual improvement through our environmental management system.

1. While complying with environmental related laws and regulations and other requirements, we make diligent efforts to prevent and control pollution, always recognize the impact of our business activities on the environment and control the impact based on our own standards.
2. In order to realize the more sustainable society and reduce the environmental burdens associated with our business activities, we focus on the following:
 - i. As a response to climate changes, we actively work on energy saving, renewable energy use, resource saving, recycling, and waste reduction, in order to reduce CO₂ emission toward carbon neutrality and make effective use of limited resources.
 - ii. In our products and production processes, we thoroughly manage any substances of concern and seek to switch to equivalent alternative substances as much as possible.
 - iii. We perform "green procurement" activity using environmentally-friendly parts and materials.
 - iv. We contribute to reducing the environmental impact on whole society promoting development and sale of environmentally friendly products.
 - v. Responding to the conservation of biodiversity as an important corporate objective, we promote initiatives considering the ecosystem.
3. We actively conduct environment-related educational activities to raise the environmental awareness of each and every employee.
4. This environmental policy will be shared with all employees and announced outside parties.

Representative Director and President
Tohru TAKAHASHI

Established on: September 27, 1998 / Revised on: March 28, 2024

Environment Management System

We consider harmony with the global environment and its preservation to be important themes, and have established an environmental management system that complies with ISO 14001 international standards, and are continuously working on environmental activities.

Environmental Organization of the Mabuchi Group

Whole Mabuchi Group is supervised by President of Headquarters, and the environmental management system of entire Mabuchi Group is supervised by Head of Quality Assurance Headquarters as Environmental Management Representative.

The Environmental Management Committee is established at the Headquarters. This committee is comprised of the chairman, who is the Environmental Management Representative, and general managers of each department. They discuss and determine the Mabuchi Group's environmental policy, objectives, and measures to be taken. Also, we have set up the Chemicals Task Force under the Environmental Management Committee. That task force proposes measures in each specialized area and promotes environmental preservation activities.

Environmental management organization chart is here. <https://www.mabuchi-motor.com/csr/environment/organization.html>

Compliance with various laws and regulations

We are taking measures to add regulated substances, change prohibited ranks, etc., according to the European RoHS Directive, the European ELV Directive, restricted substances and SVHC (substances of very high concern) of the European REACH Regulation, Class I Specified Chemical Substances under the Japanese Chemical Substances Control Law*, GADSL (voluntary standards of the automobile industry), other regulations, customer requests, Mabuchi Group voluntary standards, etc. We are responding to such requests with an eye to the future.

Thanks to our daily communication with suppliers and our proactive efforts in auditing the use and storage of environmentally hazardous substances, we have not experienced a single environmental accident since the enforcement of the European RoHS Directive in 2006. We will continue to promote green procurement activities together with our customers and suppliers.

* Chemical Substances Control Law: Law concerning examination of chemical substances and regulation of manufacturing, etc.

Initiatives towards Climate Change

The Company is promoting activities to achieve carbon neutrality by 2050 to address climate change, an urgent issue facing the international society. In May 2023, we joined the GX League* and accelerated initiatives for the reduction of GHG emissions.

Further, we have established the mid-term target of reducing CO₂ emissions 30% by 2030, compared to the level in 2018. To this end, we have been promoting initiatives to reduce CO₂ emissions, including the use of renewable energy sources and the saving of electricity at production facilities. These involve, for example, the installation of solar power generation systems and the introduction of systems for recovering and reusing waste heat. We will steadily push forward with these initiatives toward the realization of a decarbonized society.

*GX League: The Ministry of Economy, Trade and Industry established the league to be a forum for companies actively working on GX (green transformation) to collaborate with other companies and government and educational institutions engaging in similar efforts and engage in practical discussion to change the overall economic and social system and create new markets with a view toward social change and the realization of carbon neutrality by 2050.

Introducing renewable energy

The Company works to reduce CO₂ emissions by using more renewable energy. The photovoltaic power generation systems installed at our headquarters in Japan as well as at Dongguan Mabuchi and Daojiao Mabuchi in China and Danang Mabuchi in Vietnam generated nearly 3.65 million kWh of electric power in 2023 and the power was used at the respective facilities. Moreover, use of plans for electric power generated from renewable energy have ensured that our real domestic energy use has been 100% renewable energy* since April 2024. We will continue to systematically introduce renewable energy.

*Real renewable energy: Purchasing FIT non-fossil certificates and use of solar power from our rooftops



The solar power generation system installed at the Headquarters

Effective Use of Resources

Initiatives to reduce waste output

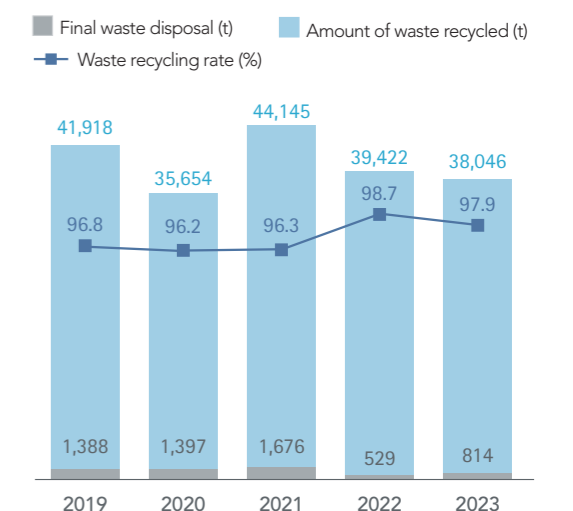
We set the target of recycling 95% or higher of the waste we generate, aiming to establish a recycling-oriented society where waste is collected and recycled as resources and the amount of waste disposed in landfills is minimized. To establish a recycling-oriented society, it is necessary to reuse waste as resources in addition to reducing waste. In addition to our current recycling rate, we started compiling our recycling rate when not including thermal recycling in 2023, and in order to improve that recycling rate, the Headquarters are working to reduce combustible materials as an environmental management system goal. The efforts to reduce and recycle waste will continue throughout the Mabuchi Group.

Waste reduction indicators and initiatives for 2023

Target — Waste recycling ratio **95.0 % or higher**

Results — Waste recycling ratio **97.9 % (achieved)**

Waste output



Initiative to Effectively Utilize Water Resources

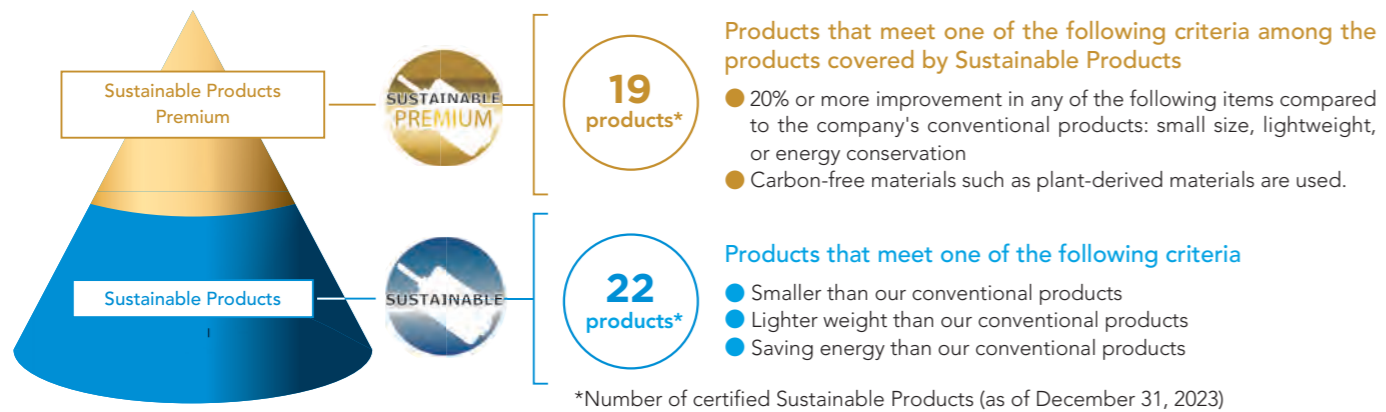
In order to conserve water resources, we actively use rainwater. The Headquarters have been using rainwater since 1991, and various Group locations are also actively using rainwater. Moreover, Jiangsu Mabuchi and other Group locations have built wastewater treatment facilities at our factories, reusing some of the treated water for watering plants and toilets. We will continue to monitor the impact of our business on water and strive to protect water resources.

Initiatives towards Environment

Creation of Environmentally Friendly Products

We contribute to reducing the environmental impact of society as a whole by standardizing small, lightweight, and highly efficient motors and achieving lean production and sales, thereby making our customers' products smaller, lighter, and more energy-efficient. In June 2022, we introduced a system to certify our products with outstanding environmental contributions as "Sustainable Products" and "Sustainable Products Premium".

By promoting the development and sale of environmentally friendly products, we will contribute to reducing the environmental impact of society as a whole. The direction of the environmental performance to be aimed for is set from the product planning stage, and the environmental performance is verified at each stage of development, design, and commercialization.



Production in Consideration of the Environment

We are working in various ways to reduce environmental impact not only with respect to the motor parts themselves, but also for chemicals used in production, power used to drive production equipment and machinery, and the working environments of our employees.

Introducing internal carbon pricing (ICP)

ICP is designed to create economic incentives to reduce emissions and internally encourage action against climate change by setting internal carbon prices and converting CO₂* emissions into a cost. In making plans for investing in equipment that emits CO₂, we apply internal carbon pricing and convert these emissions into a virtual cost. We consider this as one of the factors in equipment selection and investment decisions.

ICP at Mabuchi Motor

- Internal carbon price: 11,000 yen/t-CO₂*
- *Internal exchange rates are used for conversions at overseas bases. We will review the price as appropriate in consideration of the fluctuation of emission credit prices, etc.
- Scope of the program: Investments in facilities that emit CO₂
- Application method: CO₂ emissions are converted into a cost by applying an internal carbon price, and considered as one of the factors in the selection of equipment and the making of investment decisions.

Promoting green procurement

In procurement activities today, engaging in your company's environmental conservation activities is not sufficient for the development of products with low environmental impact during the product lifecycle from the collection of raw material resources to the manufacturing, processing, logistics, sale, consumption, use, disposal and recycling of the product.

Therefore we evaluate suppliers' environmental initiatives and cooperate with the suppliers in the reduction of environmental impact and the avoiding of environmental risks. We ask our suppliers to implement green procurement activities and fill in and submit an environmental activity survey sheet and documents guaranteeing that their raw materials and parts do not contain environmentally banned substances. We also actively conduct environmental audits to check suppliers' use and storage of environmentally hazardous substances.

In addition, all materials used by the Mabuchi Group are regularly analyzed and surveyed to ensure that they do not contain environmentally banned substances.

Initiatives to Preserve Biodiversity

Environmental symbiosis in the community

A "bio-garden" has been established in the front of the Headquarters site based on the concept of environmental symbiosis in the community. It is designed to restore the natural environment of Matsudo-city, where the Headquarters is located, to the Matsuhidai Industrial Park. Considering the impact of non-native species on the local ecosystem, the goal of the bio-garden is to restore the original ecosystem by planting wildflowers that have traditionally grown around Matsudo-city.

Moreover, we have implemented rooftop greening, which is said to effectively help mitigate urban heat island effects, and have created a garden on the roof of our headquarters. It is also a place for employees to communicate with each other during breaks.

From 2024, we will collaborate with the Nature Conservation Society of Japan, of which we are now a member, to further promote biodiversity-related activities.



Bio-garden in front of the Headquarters



Rooftop garden at the Headquarters

Initiatives

- Growing Himekomatsu, an endangered species designated by Chiba Prefecture
- Exterminated a non-native species (tall goldenrod) to maintain the bio-garden
- Biodiversity Chiba Network's activities: Satellite for Biodiversity remodeled

The Satellite for Biodiversity is placed in the Headquarters cafeteria for displaying posters and newsletters to enable employees and visitors to deepen their understanding about the importance of biodiversity.

Environment Communication

We believe it is important for each employee to understand the relevant Environmental Policies and take the initiative based on an awareness of, knowledge on, and ability in environmental affairs. To train employees who can implement the above, we are implementing our environmental education and training system. For the Headquarters and each base, we have established "general education" that each employee receives, and have constructed an environmental education and training system by job level, workplace and activity.

Rewarding Employee Activities to Reduce Environmental Impact

Measures and results that contributed to reduction of environmental impact are collected from all of the bases of the Mabuchi Group as we are committed to the Mabuchi Group's environment activities to commend outstanding activities via evaluation by the Environmental Management Committee at the Headquarters.

In 2023, a total of 87 activities for CO₂ emissions reduction were submitted from 15 bases and many different measures were taken. Through the Mabuchi Group's environmental activities, we will facilitate the proposal and implementation of measures to reduce the environmental impact of the different bases of the Mabuchi Group, thereby expanding our contribution to global environment.

TOPICS

Examples of Poland Mabuchi's activities

In order to reduce energy consumption for heating and cooling by efficiently using outside air temperatures in the ventilation units that supply air to the main production area, Poland Mabuchi has introduced a circulating-type ventilation system that operates according to the outside air temperature and the temperature inside the production area, thereby reducing CO₂ emissions by approximately 414 tons per year.

