

# Environmental Management

## Minebea's Environmental Philosophy

In recent years, environmental problems are occurring on a global scale. These include the destruction of ecosystems due to ocean pollution; natural disasters that may be the result of global warming; and damage brought on by human use of hazardous chemical substances. In response, the Minebea Group has established Minebea's Environmental Philosophy and long been actively addressing environmental issues, and we are engaged in environmental conservation activities at locations around the globe.

Specifically, we promote the use of highly energy-efficient equipment and processes to reduce emissions of greenhouse gases, principally CO<sub>2</sub>. We conserve materials, water, and other resources, and are strengthening our initiatives to reduce plant waste and

effluents. At the same time, we are actively working to develop high-efficiency motors, lighting systems, and energy conversion devices; the control technologies and sensors that are the key to energy management for those motors, lighting systems, and devices; and new materials, and are supplying the infrastructure required to build a new society.

The Minebea Group will celebrate the centenary of its establishment in 2051. In the preceding year of 2050, the results of efforts to prevent global warming through the unified efforts of governments, enterprises, and households will become clear. We will promote environmental measures with Minebea's Environmental Philosophy as the basis for all aspects of our manufacturing activities, so that in 2050 humanity can coexist with an abundant global environment, and continued world prosperity will be possible.

## Minebea's Environmental Philosophy

Established August 26, 1993  
Revised April 1, 2009

Minebea strives to contribute to higher quality, more comfortable lifestyles by providing truly valuable products and services. At the same time, the Company works to minimize the environmental burden of its various activities and promote greater harmony, thereby contributing to the presentation and improvement of a healthy environment.

### Environmental Policy

#### ① Development and Design

Minebea shall focus on the development and design of products that contain no hazardous substances for the environment or the health and safety of humans, consume little energy and satisfy the "3R" (reduced, reused or recycled) criteria.

#### ② Manufacturing

Minebea shall set targets and restructure and revise its manufacturing procedures by using materials that contain no hazardous substances for the environment or the health and safety of humans, thereby improving yield, reducing waste and lowering energy consumption.

#### ③ Logistics

Minebea shall employ packing materials that contain no hazardous substances for the environment or the health and safety of humans and satisfy the "3R" criteria, as well as procedures that lower energy consumption and prevent the release of hazardous substances.

#### ④ Cooperation with Authorities and Local Public Entities

Minebea shall observe environment-related rules and regulations imposed by the country and local authorities and support environmental conservation and prevention of pollution.

#### ⑤ Overseas Activities

In its manufacturing and distribution activities overseas, Minebea shall observe environment-related rules and regulations imposed by local authorities and do its best to preserve environment and prevention of pollution in adjacent areas. Minebea shall also be an aggressive supplier of new environmental protection technologies.

#### ⑥ Environmental Audits

Minebea shall conduct periodical environmental audits at all of its manufacturing and other facilities with the aim of ensuring the effective implementation and continual improvement of its environmental management system.

#### ⑦ Employee Education

Minebea shall require employees to attend courses to encourage their involvement in environmental protection activities in the workplace and at home.

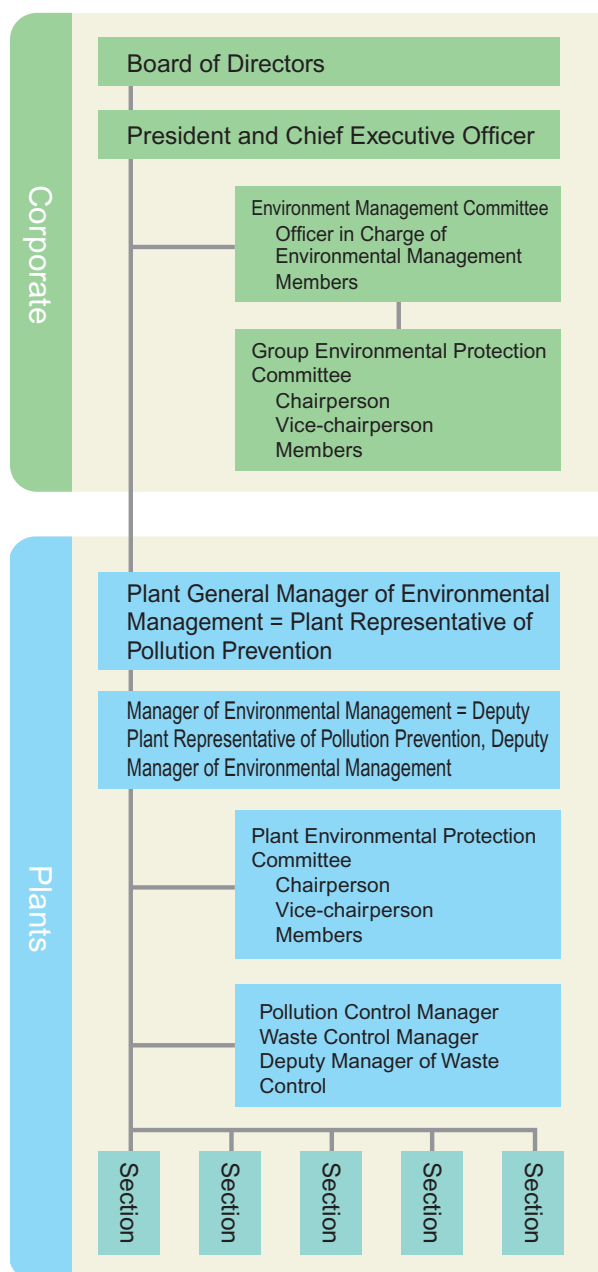
#### ⑧ Observe Minebea's Environmental Policy

All Minebea Group employees and other individual working at our sites shall adhere to Minebea's Environmental Policy. If any individual has an environment-related concern, he/she shall report it promptly to his/her manager, who shall respond promptly.

## Environmental Management System

### ● Environmental Management Structure

A sense of crisis with respect to global warming has brought with it the expectation that enterprises will make efforts to achieve substantive greenhouse gas reduction. In addition, such trends as restrictions on harmful chemical substances incorporated in products are making environmentally related initiatives an increasingly important aspect of enterprise risk management.



In response to these social changes and expectations, the Minebea Group has established an Environment Management Committee, staffed by company officers, at a higher level than the former Group Environmental Protection Committee. This strengthening of our system was carried out to enable prompt deliberation by the Senior Executive Officer Council and the Board of Directors with respect to environmental measures requiring large-scale investment as well as major decisions affecting company management.

### ● Environmental Audits

The Minebea Group has acquired ISO 14001 certification for all of its major production facilities worldwide. To maintain this certification, these venues undergo annual external audits by a third-party agency as well as internal audits by company auditors.

To implement internal auditing, the Minebea Group holds annual training seminars for internal auditors taught by employees qualified as external auditors, as well as by veteran internal auditors.

In addition, due to the Great East Japan Earthquake and the confusion in its aftermath, training courses scheduled for March 2011 were rescheduled for the summer of 2011 or later.



April 2011 audit, Matsuida Plant

### ● Strict Adherence to Laws and Regulations

To enforce compliance with environmental laws, every place of business in the Minebea Group sets and manages its own standard reference values. These values exceed the legal requirements of the relevant country or region. Third-party agencies are periodically asked to assess monitored areas of importance, and where required the results of these assessments are reported to relevant authorities.

# Environmental Management

## Environmental Education

### ● Basic Approach and FY2010 Initiatives

The Minebea Group believes that raising the environmental awareness of each of us will help protect and nurture our future environment. In addition to activities within the company, we want employees to be proactive in environmental conservation at home and in their local communities. To this end, we offer easily understood education materials and a variety of environmental education initiatives based on them. Following are representative examples of environmental education initiatives conducted in Japan in FY2010.

#### ① Environmental management basics training

- Education for new employees of the Minebea Group (67 persons, 100%)
- Education for new employees at company facilities (60 persons, 100%)
- Environmental training for mid-career hires (109 persons, 100%)

#### ② General environmental education

- Education for environmental policies, objectives/indices, implementation plans, etc. (all employees)
- In-house environmental newspaper *Hello Environment!* and in-house magazine *Shiho* (all employees)

#### ③ ISO14001 internal auditor training

- Internal auditor training courses  
\*Delayed due to Great East Japan Earthquake
- Internal auditor refresher courses (60 persons, 45%)  
\*For all staff qualified as internal auditors

#### ④ Waste management education

- Education on appropriate methods for waste disposal (all employees)

#### ⑤ Emergency response training

- Training for evacuation and response to possible disasters (all employees)
- Training with facilities and equipment used in possible emergency circumstances (203 persons, 100%)

#### Note:

Education initiatives listed above were planned and carried out by the Group Environment Management Department and/or Environmental Management Office at each plant, and do not include initiatives implemented independently within specific work places. Additionally, participant totals are those reported as attending education initiatives at plants.

### ● Environmental Education for New Employees

The Minebea Group conducts a collective education program for new employees upon their intake each year. Environmental education is an important part of this program, with a curriculum covering such topics as environmental issues and countermeasures, the environmental impact of the Minebea Group's business activities, our environment management system and its activities and initiatives.

We also provide our employees with guidance to maintain their responsibility toward and awareness of the environment, not only as members of the Minebea Group, but also as individual members of society. We use the content of reports collected from employees upon conclusion of their training to confirm that they have deepened their understanding of environmental issues and preservation activities.



Environmental education for new employees carried out in April 2010

### ● Publication of the Minebea Group's In-house Environmental Newspaper *Hello Environment!*

Each month, the Minebea Group publishes its in-house environmental newspaper, *Hello Environment!* Each issue focuses on a particular educational theme with easily understood, instructive articles.

In addition, articles cover not only Minebea Group environmental initiatives, but also everyday life and the natural environment, to encourage employees to take a broad interest in the environment of society as well. The first issue was published independently at the Group's Hamamatsu Plant in January 2000 as an environmental newspaper, and as of March 2011 was in its 130th issue in its current form as the environmental newspaper of the Minebea Group.



The Group's in-house environmental newspaper *Hello Environment!*



## Environmental Communications

### ● Basic Approach

So that as many people as possible may become aware of the Minebea Group's initiatives to preserve the environment, we publicize those initiatives and their results on the Internet and through a variety of means including CSR reports, company brochures, and annual reports. We also participate actively in the activities of local communities, creating opportunities to introduce the Minebea Group's environmental initiatives.

### ● Environment One-click Fund-raising (Fujisawa Plant)

The Minebea Group's Fujisawa Plant, located in Fujisawa City, Kanagawa Prefecture, collaborates with local government, enterprises, and residents to carry out Fujisawa City Environment One-click Fund-raising, an initiative in response to current environmental problems, exemplified by global warming.

The goal of this initiative is to raise local residents' environmental awareness, publicize the social contributions of participating enterprises, and enhance the education of children, who will become the next generation of adults. The Minebea Group has participated in this initiative since July 2009. Fund-raising takes place simply by clicking the icon on the participating enterprise's environmental activity-related web page. For each click received, the participating enterprise contributes five yen on behalf of that person. The funds collected go to provide Fujisawa City schools with teaching materials relating to the environment.

During FY2010, a total of 41,230 yen for 8,246 clicks was contributed on behalf of visitors clicking the fund-raising icon on the Fujisawa Plant's environment-related web page.

Fujisawa City Environment One-click Fund-raising at the Fujisawa Plant  
<http://fj4.city.fujisawa.kanagawa.jp/oneclick/index.php>



Minebea's web page promotes Fujisawa City Environment One-click Fund-raising

## Initiatives for Preserving Biodiversity

### ● Basic Approach

The Minebea Group is prioritizing the evaluation of biodiversity in the natural environments surrounding its places of business and manufacturing facilities, in response to the rise in importance of biodiversity preservation in recent years.

Minebea aims to strike a balance between its business activities and biodiversity preservation, and is working to strengthen cooperation with local communities.

### ● Hamamatsu Plant Recognized as Outstanding Greening Plant

The Hamamatsu Plant is located in an abundant natural area, surrounded by forests, mountains and farmland. Consequently, since its construction the plant has undertaken to coexist with the surrounding environment, and greening efforts have been promoted on the plant premises. For example, tea plants dating to before the plant's construction remain on the premises, and the plants are still maintained to preserve their beauty.

In addition, large trees have been planted around the plant, and shrubs such as rhododendron and azalea have been planted on the premises to preserve the scenery visible from nearby roads.

In recognition of its years of effort in this regard, the Hamamatsu Plant received the Japan Greenery Research and Development Center's Chairman Prize at the 29th All-Japan Factory Greening Promotion Competition.



Overall view of Hamamatsu Plant today



Tea plants within the Hamamatsu Plant

# Environmental Management

## Minebea's Impacts on the Environment

The Minebea Group has 32 plants and 39 sales offices in 17 countries around the world, manufacturing and selling a range of products including bearings, our main product, as well as such products as machined components, rotary components, and electronic devices.

In FY2010, the environmental impact of the inputs and outputs from the Group's major facilities was as follows.

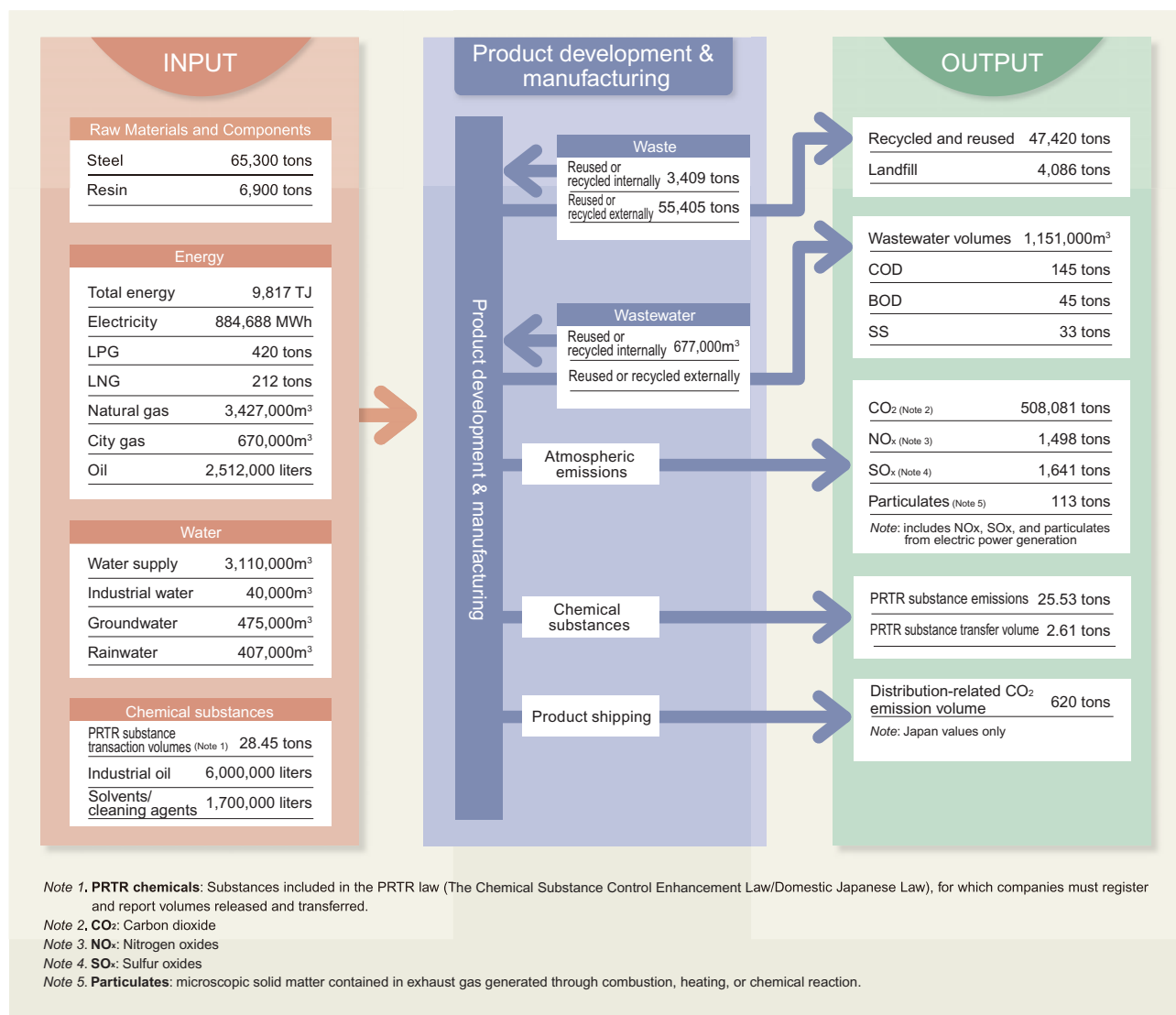
When environmental impact is viewed in terms of the ratio of total production by region to sales, Asia (excluding Japan) is estimated to account for approximately 80% of the Minebea Group's consumption and output.

The Lincoln Plant is located in Lincoln, a city in Lincolnshire County in eastern England. The plant manufactures rod ends and spherical bearings. Lincoln

is home to numerous historical structures and greenery-filled parks, and is a major agricultural center. The Lincoln Plant promotes business initiatives to reduce the environmental impact of its operations in the region.



The Lincoln Plant, U.K.

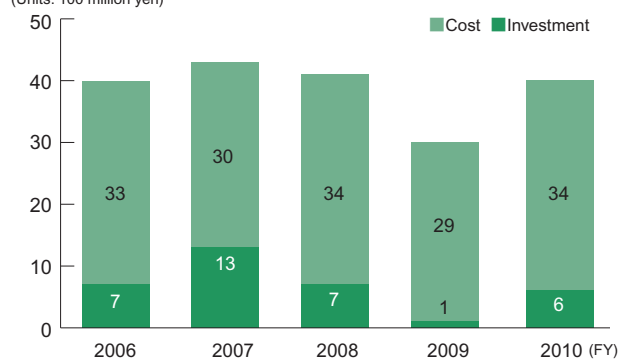


## Environmental Accounting

As enterprises promote initiatives to preserve the environment, it is important for them to track the costs incurred for such preservation as well as their results, and to make this information available to society. The Minebea Group carries out environmental accounting with reference to “Environmental Accounting Guidelines 2005” issued by Japan’s Ministry of the Environment. Total costs expended by the Minebea Group to preserve the environment in FY2010 amounted to 3,991 million yen.

## Environmental Protection Costs

(Units: 100 million yen)



(Units: million yen)

Environmental Protection Activity Costs				Total	
Category			Activity	Investment	Expenses
1	Business area costs (costs to minimize the environmental impact from manufacturing and service activities within the business area)		As set forth in breakdown for ①, ②, and ③	629	2,884
	Breakdown	① Pollution prevention costs	Costs related to installation, disposal, maintenance, management, etc. of facilities to prevent water and air pollution	49	557
		② Environmental protection costs	Costs for installation of ozone-depleting substance (ODS)-free water-based cleaning facilities, high-efficiency refrigerators, depreciation, operating and maintenance costs, etc.	454	1,846
		③ Resource recycling costs	Equipment and costs for waste disposal and recycling. etc.	126	481
2	Upstream/downstream costs (costs to minimize the impact of key upstream and downstream operations)		Costs related to analyzer installation and materials analysis as part of the Green Procurement Program; printing and revenue stamp costs for contracts with suppliers, etc.	0	29
3	Administrative costs		Personnel, maintenance and management costs for environmental management system, etc.	3	272
4	R&D costs		Costs related to the research and development of ODS-free water-based cleaning facilities, etc.	0	22
5	Community activity costs		Costs related to greening programs, landscape preservation, etc.	0	17
6	Environmental remediation costs		Costs related to soil replacement and operation, maintenance and depreciation of water-based cleaning facilities, etc.	0	135
Total				632	3,359

Yen exchange rates: 1USD=¥86.0 1EUR=¥113.2 1THB=¥2.7 1CHY=¥12.8 1SGD=¥64.1 1GBP=¥133.0 1MYR=¥27.3

## Environmental Protection Plan

### Overview of FY2010

The Minebea Group has established an Environmental Protection Plan to realize Minebea’s Environmental Philosophy, and is working to achieve the goals of this plan.

In FY2010, the Minebea Group’s business results and manufacturing activities recovered from their decline caused by the world economic slump in the wake of the global financial crisis. Compared to the previous term, energy and raw materials usage increased. Nevertheless, we continued to adhere strictly to local laws at our plants and places of business worldwide, and there were no violations of environmental statutes. Our product

development, which holds the key to our future as an enterprise, is developing highly energy-efficient motors, AC-DC converters and other new eco-friendly products.

In striving to preserve the environment, considering the environment at the product distribution stage is just as important for enterprises as doing so at the production stage, and the Minebea Group is working steadily to realize such measures as recyclable product packaging.

For FY2011, we have decided to establish and work toward goal fulfillment in all of our CSR activities. Consequently, our ongoing Environmental Protection Plan has been designated as one of our CSR goals (see page 17), and going forward we will apply a PDCA cycle to our environmental protection initiatives in an appropriate manner.