

Environmental Report 2004



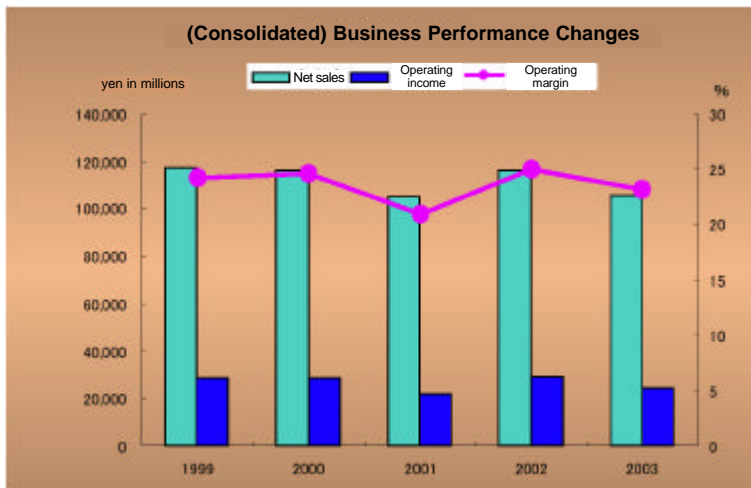


New office building of Mabuchi Motor Co., Ltd., Headquarters scheduled to be completed in September 2004

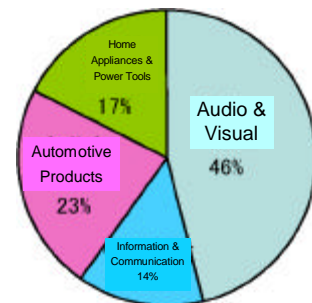
Company Outline

Trade name:	MABUCHI MOTOR CO., LTD.	President:	Shinji Kamei
Established:	January 18, 1954	Address:	Headquarters:
Field of Operations:	Manufacture and sales of small electric motors		430 Matsuhidai, Matsudo-shi, Chiba-ken, 270-2280 Japan
Capital:	20,700 million yen (as of December 31, 2003)		TEL: +81-47-710-1111 (key number) FAX: +81-47-710-1141
President:	Shinji Kamei		
Employees:	Headquarters: 947 Mabuchi Group: approximately 52,000 (as of December 31, 2003)	Technology Center:	280 Ryufukuji, Motono-son, Inba-gun, Chiba-ken, 270-2393 Japan TEL: +81-476-97-1331 (key number) FAX: +81-476-80-9015

Note: In October 2004, our headquarters is to move to the new office building. At that time, the above phone number and fax number might change. Please check our latest phone number and fax number on our home page.



Percentage of Motor Production by Application (2003 fiscal year)



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Reporting Period/Scope and the like of Mabuchi Motor Environmental Report 2004

<p>Year: fiscal year 2003 (January 1, 2003 through December 31, 2003)</p> <p>Companies: Headquarters and overseas related companies</p> <p>Activities: Contents of environmental activities related to manufacture and sales of motors and provision of services</p>	<p><Remarks></p> <p>a. In this Report, "overseas related companies" mean the following companies: Hong Kong Mabuchi (including Guangdong Mabuchi) Taiwan Mabuchi Kaohsiung Mabuchi Dalian Mabuchi (including Wafangdian Mabuchi) Malaysia Mabuchi Jiangsu Mabuchi Vietnam Mabuchi</p> <p>b. In this Report, "Mabuchi Group" means a general term for a group consisting of "Headquarters" and "overseas related companies" above.</p>
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Message from President



In May 2004, the Japanese government announced the emission of the greenhouse effect gas of the fiscal year 2002. It was 1,331 million tons (in terms of CO₂), up 2.2% and 7.6% from the preceding year and 1990, the base year stipulated in the Kyoto Protocol, respectively. The government's analysis indicates that it was mainly caused by the growth of electrical energy generated by thermal power plants resulting from the suspended operation of nuclear power plants. For the fiscal year 2003, the emissions seem to have increased because we found no factor that might significantly reduce the emissions.

As you know, in the Kyoto Protocol, a worldwide agreement to prevent global warming, Japan committed to reduce its emissions of carbon dioxide (CO₂) on average 6 percent during the target period (2008 through 2012) in comparison with the figure in the base year of 1990. However, the emissions already showed increase by 7.6% as of 2002, which means the situation has been worsening. In such circumstances, even with the use of emission transaction or CDM (Clean Development Mechanism: a system to obtain the right to emit CO₂ introduced in the Kyoto Protocol), it seems to become extremely difficult to meet the commitment.

Global warming, which might cause sea-level rise, abnormal weather, disruption of ecosystem, and the like, would make a devastating and serious impact on flora and fauna including human beings. Therefore, even though it becomes difficult to attain the reduction target, we are never allowed to walk out on our commitment halfway. To enable human beings to enjoy healthy and productive global environment, not only countries, regions, and companies but also ordinary households have to work on reducing CO₂ emissions more seriously than ever before.

Release of health-threatening hazardous substances is also one of the big social problems. Our small motors are incorporated into automotive products, audio and visual products, office automation equipment, home appliances, power tools, toys, etc. and are used widely worldwide. Therefore, “to develop environmentally-conforming products” that are free from hazardous chemical substances having an adverse effect on human bodies and “to manage clean manufacturing” across the whole supply chain are Mabuchi Motor’s important social responsibilities. Mabuchi Motor’s whole organization including its overseas related companies will continuously make further efforts to meet its goal in order to fulfill the responsibilities in a positive manner.

No company develops without paying attention to the environment and society. I think that disclosure of Mabuchi Group’s efforts to preserve environment is of great significance to steadily promote Mabuchi’s environmental protection activities. We have compiled this “Environmental Report” on our efforts to preserve environment mainly in fiscal year 2003. We would highly appreciate candid opinions and thoughts about this report.

August 2004



Shinji Kamei

President and Representative Director
Mabuchi Motor Co., Ltd.



Management Philosophy

Mabuchi Motor expresses its environmental philosophy in its management philosophy and management guidelines, which are the starting point and, at the same time, the goal of its business activities.

Management Philosophy

Contributing to International Society and Ever-expanding Our Contribution

Management Guidelines-1

Create superior and reasonably priced products. Our hope is to help build a more satisfying and comfortable life for customers around the world who enjoy a life with products using our motors.

Management Guidelines-2

Transfer our technology and bring forth new opportunities for employment. We hope that our contribution can become a helping hand in leveling international economic disparities and stimulating global economic development.

Management Guidelines-3

By placing "people" as an important managerial resource, we strive to heighten individual potential through work, and to raise more productive citizens of society.

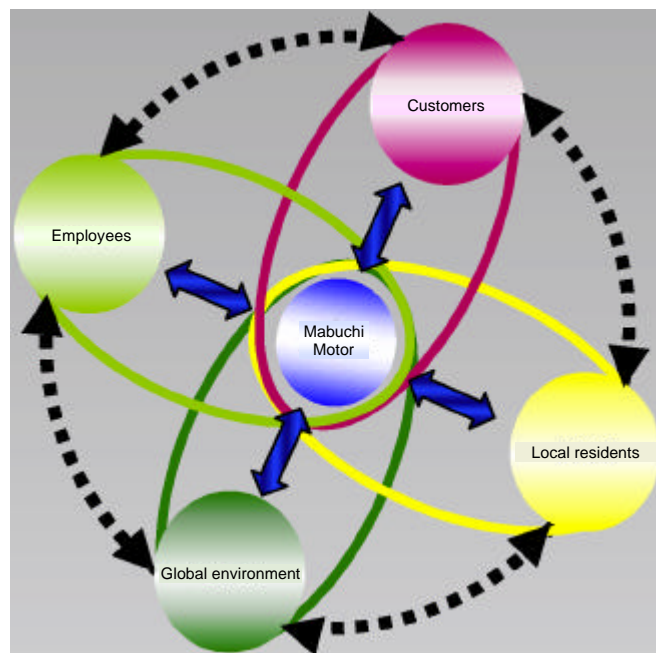
Management Guidelines-4

Conduct corporate activities that promote the preservation of our earth's environment and our own human health.

Mabuchi Motor, which has management philosophy of contribution to the international society, must not cause any harm to the global environment for any reason. Its basic desire is to remain a must in the world. Mabuchi Motor has to carry out measures for global environment and against regional pollution according to this basic desire.

Mabuchi Motor must remain constructive, harmless, and indispensable to the world from all viewpoints of employees, customers, local residents, global environment, etc.

Excerpts from Description of Mabuchi Group's Management Philosophy (issued in 1993)





Environmental Policy

Mabuchi Motor's management philosophy is embodied in its basic policy for environment in the field of environmental management.

Basic Policy for Environment

1. We establish an environmental management system (EMS) for conducting corporate activities considering global environment and make efforts to continuously improve both the corporate activities and EMS.
2. We strictly observe environment-related laws, regulations and other requirements and positively establish and control self-imposed environment-related standards.
3. In order to use limited resources as effectively as possible, we positively address energy saving, recycling, and reducing the amount of wastes.
4. We replace substances, which cause environmental loads, with their substitutes as much as possible.
5. In order to raise employees' awareness, we positively carry out education and public relations.
6. We make each Environmental Policy, which Headquarters or each production base has established as concrete environmental measures, known to each employee concerned, and as necessary we disclose it to external parties concerned.

Established on: September 27, 1998



New Headquarters of Mabuchi Motor Evolving with the Times

In commemoration of its 50th anniversary, Mabuchi Motor outlines its half-century history and is constructing its new office building as a new challenge toward the 21st century.

Basic concept of the new office building

- Global headquarters and development-specific base
- Realization of departure from factory
- Integration to create an advanced IT office
- Source and sending base of new wisdom and energy
- Symbiosis with local communities



Design emphasizing environment and human beings

Creation of high credibility

In order to extend the life of the building, we used highly durable materials such as glass and brick in consideration of maintenance and modifiability.

We adopted special-grade seismically isolated structure that significantly reduces earthquake input.

The infrastructure such as power source, heat source, water source, and communication is doubled and such resources are stored to reduce facility-specific risks. Both hardware and software are highly reliable.

Comfortable and efficient working environment

PC prestressed slab, concrete reinforced by special construction method, realizes 1,500-square-meter spacious workplace without pillar that is highly flexible and efficient.

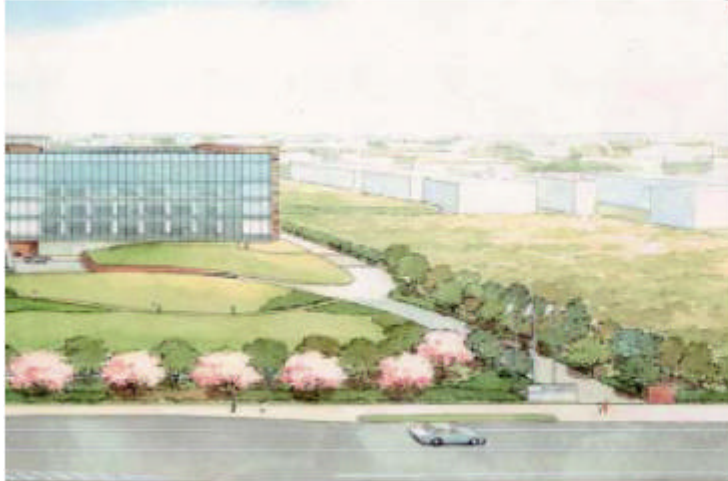
The double-glazed glass covering the southern side of the building introduces only light and emits heat. In addition, ambient (indirect) lighting makes the office space bright and open and provides a good view.

Time passage in a green space

The building has, at its center, a space for spiritual healing that extends from underground to the ceiling. It is called atrium.

Aiming at symbiosis with regional communities, we will create a spacious garden available to local residents in the southern side of the building. The spacious bio garden has artificial ponds in which water plants and insects live wild. People can enjoy wild birds' twittering and flowers and trees of each season. The garden provides relaxation with rich green.





Outline of the new office building	
1. Site address	: 430 Matsuhidai, Matsudo-shi, Chiba-ken (address of the existing headquarters)
2. Structure and scale	: SRC (seismically isolated structure) – four stories above ground and one underground story
3. Plottage	: 41,857.62 m ² 17,741.86 m ² (plottage of the site in which the new office building will be built)
4. Building area	: 4,928.37 m ² Total floor area: 19,421.65 m ²
5. Design	: Nihonsekkei, Inc. IBM Japan
6. Construction	: Shimizu Corporation Air conditioning and sanitation: Shinryo Corporation Electric work: Kandenko Co., Ltd.
7. Construction period (schedule):	commencement of construction work – May 2003 Completion of construction work – September 2004
Inauguration – August 2005 (The office building will be inaugurated after the building in the northern area of the site is remodeled, dismantled, and created.)	

Environment-friendly construction work

Introduction of environment-friendly state-of-the-art technology

The building's operational energy can be reduced by: (1) double-skin walls that improve insulation efficiency, (2) cool heat pit to use ground surface heat when taking in fresh air, and (3) building-frame thermal storage for temperature adjustment by storing heat in concrete of higher specific heat.

The floor-flow air conditioning improves individual controllability and realizes energy saving.

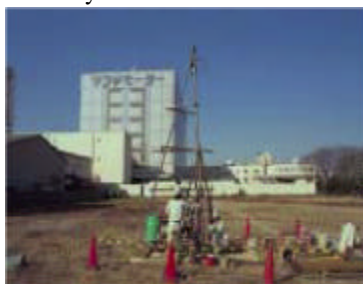
The hybrid lightings established in the garden space make use of sunlight and wind force.



Hybrid lightings

Thorough environmental assessment

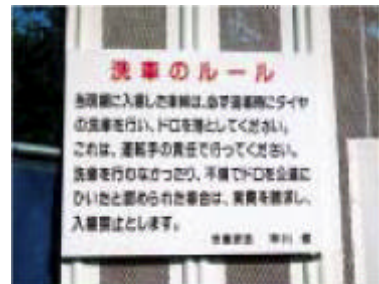
We have made an examination to predict the environmental impacts caused by the construction of the building and put emphasis on environmental preservation. The prior examination on soil and water, which revealed no problem, is being followed up with periodic examinations. Taking into consideration the effect on local residents, we will try to eliminate vibration, noise, and dusts. In order to enable people to feel the nature closer, we will also put our efforts into soil improvement, plant cultivation, and creation of waterfront, building up an ecosystem that attracts wild birds.



Environmental preservation measures taken at the construction site

While constructing the building, we made further efforts to reduce wastes, bearing 4R in mind — recycle, reuse, reduce, and refuse. We always pay attention to the surrounding communities. We endeavored to reduce noise and vibration, to thoroughly clean vehicles not to contaminate roads, and not to produce dusts by watering in the process of curing and operations.

We also tried to ensure idling stop, power saving, and wastewater treatment.





Environmental Management Promotion Scheme

Mabuchi Motor has established a global environmental management organization to effectively operate its environmental management system.

Environmental management organization

In June 1997, we established “Environmental Management Committee” which discusses and determines policies, targets, measures and the like for Mabuchi Group’s environmental protection activities. In addition, specialty sectional meetings are established as needed below the committee to plan measures for management of wastes, chemical substances, and the like.

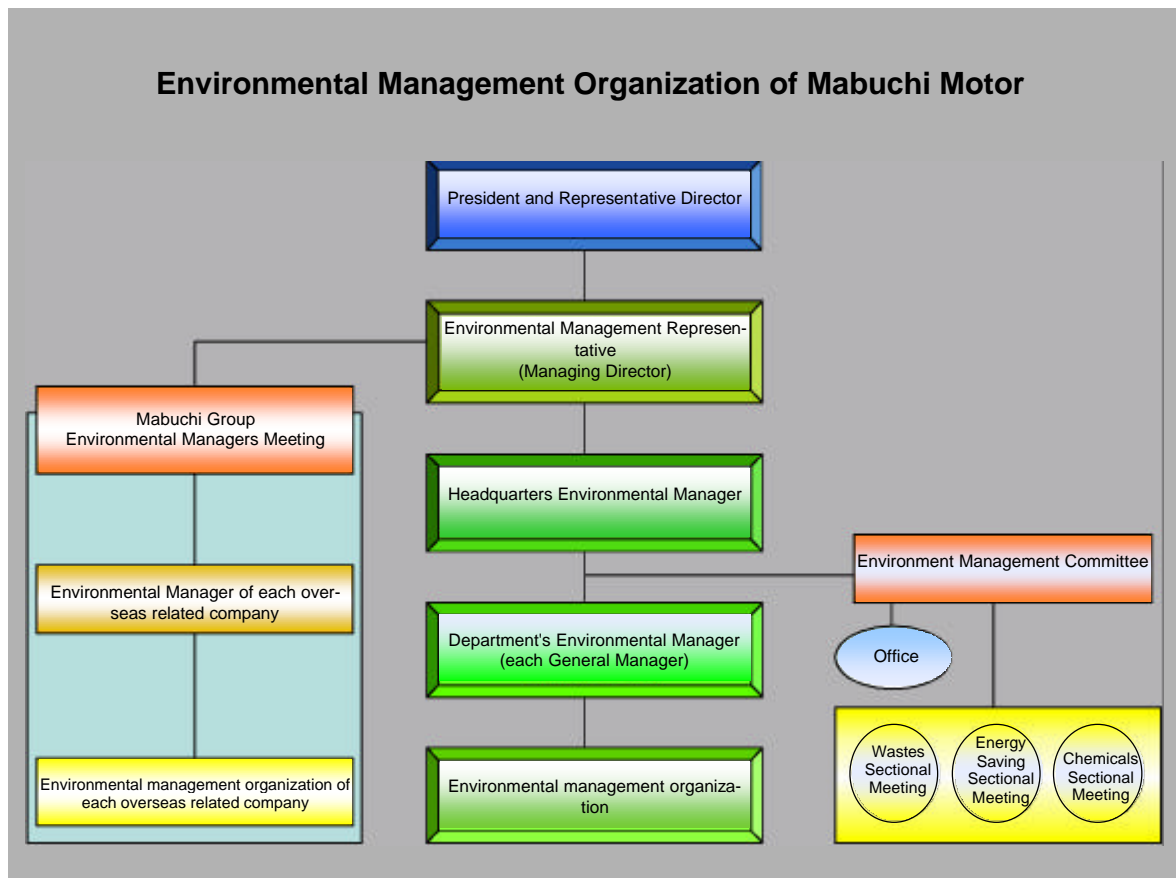
Each overseas related company is

also conducting environmental protection activities led by Environmental Manager.

For the purpose of sharing environment-related information among Headquarters and overseas related companies and efficiently performing environmental protection activities, we have been holding “Environmental Managers Meeting,” which consists of Environmental Managers of respective companies in Mabuchi Group, since 2000.

So far we have held this Meeting in the following areas:

The first Meeting	(September 2000): Vietnam Mabuchi
The second Meeting	(September 2001): Jiangsu Mabuchi
The third Meeting	(September 2002): Dalian Mabuchi
The fourth Meeting	(October 2003): Hong Kong Mabuchi

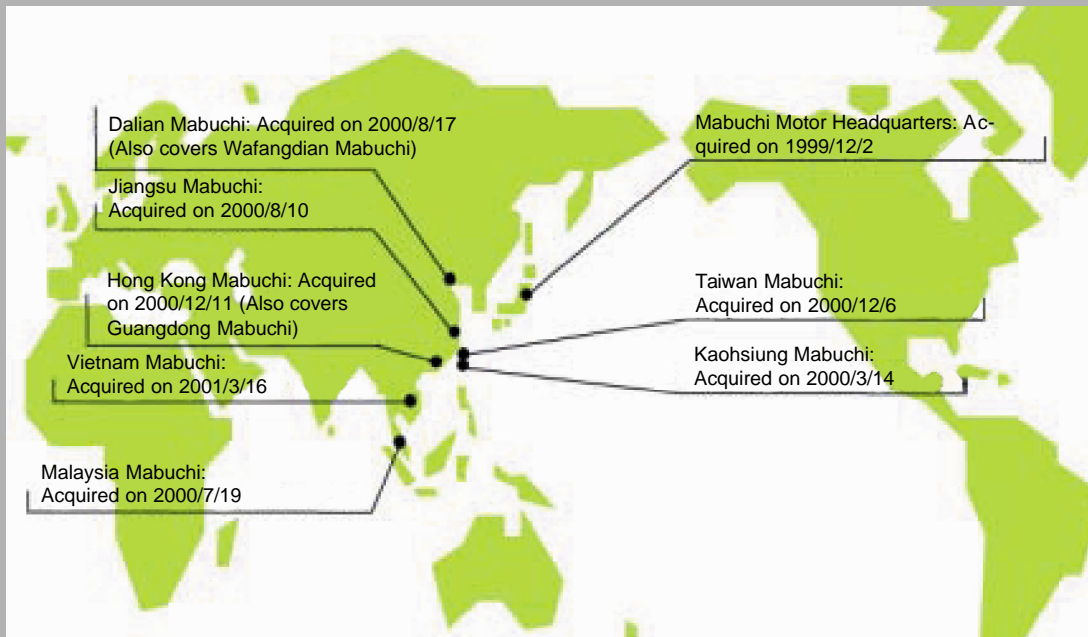




Acquisition of Certification for Environmental Management System

Mabuchi Motor acquired ISO14001, an international standard of environmental management system, in 1999 and has maintained it since then.

Mabuchi Group's Track Record on Acquisition of ISO 14001 Certification



Acquisition of ISO 14001 Certification

From December 1999 to March 2001, in order to organize and systematize environmental management activities and heighten their clearness to society, Mabuchi Motor has acquired certification of ISO 14001, International Standard of environmental management, in



DNV carried out an audit together with Mabuchi Motor's top management.

Headquarters and all the overseas related companies.

In October 2002, DNV Japan carried out an "ISO 14001 environmental management recertification audit" for Headquarters. As a result of this audit, DNV Japan awarded recertification (that is effective until December 2005) to Headquarters.

In fiscal year 2003, all overseas related companies applied for "ISO 14001 environmental management recertification" and, as a result, acquired the recertification effective for the continuous period of three years.

In the past, Hong Kong Mabuchi, Dalian Mabuchi, and Jiangsu Mabuchi, which are situated in China, made application for certification to China Certification Center Inc. (CCCI). For Hong Kong Mabuchi and Jiangsu



Certificate of ISO14001 awarded to Mabuchi Motor's Headquarters

Mabuchi, we changed the certification body to DNV China in the process of this recertification.

We will try to operate our system in order to achieve higher level of environmental performance.



Environmental Audit

Mabuchi Motor periodically evaluates and reviews its environmental management system to continuously raise its environmental level.

Environmental Audit

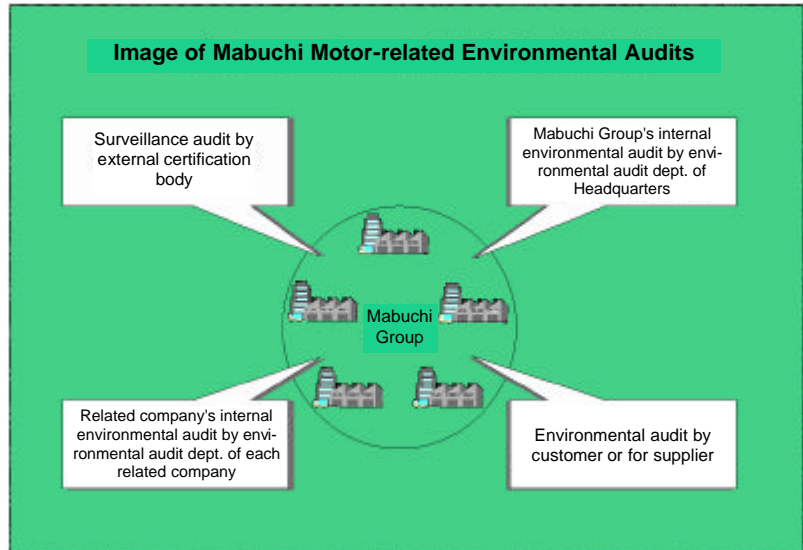
Mabuchi Motor carries out environmental audits as a means to confirm and verify whether its own environmental management system completely satisfies the requirements of standards and is properly operated. Environmental audits are roughly classified as follows:

1. ISO 14001 surveillance audit by an external certification body
2. An internal environmental audit by an environmental audit department of Headquarters. This audit is for each department of Headquarters and each related company of Mabuchi Group.
3. Internal environmental audit carried out by environmental audit departments of overseas related companies
4. An environmental audit by our customer for Mabuchi and an environmental audit by Mabuchi for our supplier.



Periodic audit carried out by DNV (at Headquarters)

Headquarters' environment-related departments carry out internal audits not only to verify the suitability, maintenance, and management of the environmental management system but also to evaluate actual results of environmental targets. They interview employees to know to what degree the sense of environmental preservation percolates in the company. Furthermore, we make the following matters available across the whole Mabuchi Group: (1) matters



to be corrected that are revealed through internal environmental audits, and (2) excellent environmental management techniques. Through such activities, we will improve the environmental management level of the whole Mabuchi Group.

In 2003, Mabuchi Motor, according to its environment-related program, carried out audits for environmental management systems of five suppliers including a waste disposer to which an overseas related company consigned its work. We made such suppliers understand the details of our environmental management system including the environmental policy. At the same time, we checked their work management and law-abiding conditions. The audit result showed



Internal environmental audit of overseas related companies conducted by Headquarters



Audit of an overseas waste disposer

that all suppliers attained the level necessary for the certification. Therefore, we continued to consign the waste disposal work to them in fiscal year 2004.

Mabuchi Motor breached no environmental laws and regulations, caused no accident, and paid no penalty relating thereto in the course of its business activities in fiscal year 2003.

The result of such external and internal environmental audits is reported to the top management as important data for evaluating and reviewing the environmental management system. We will remedy the problems shown by the result of the audit and continuously try to raise the environmental management level.



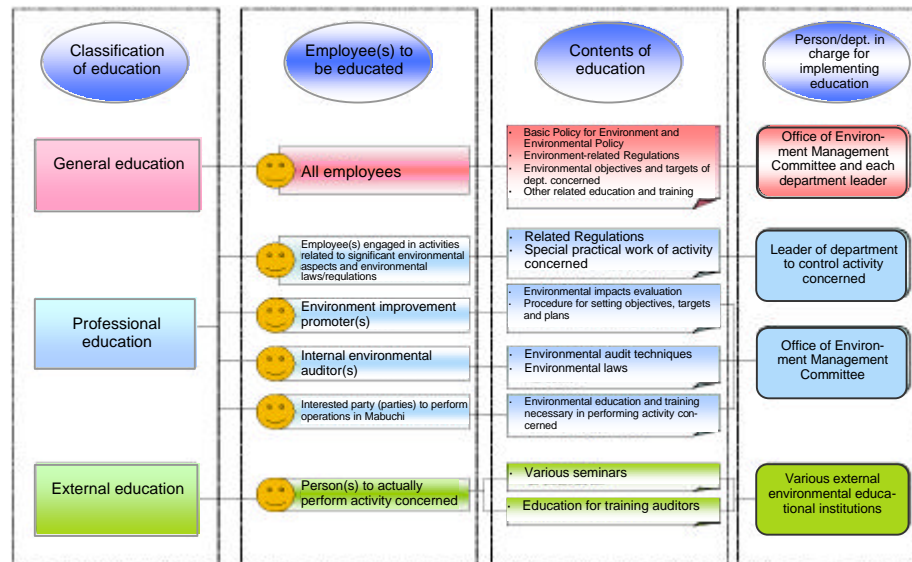
Environmental Education and Training

Mabuchi Motor provides individual employees with environmental education and training in a systematic way to improve their sense of environment preservation and promote their environmental protection activities.

Environmental Education and Training

Mabuchi Motor's Environmental Education System

Regarding environmental activities, we believe it is important that each employee understands Environmental Policy concerned, recognizes the environmental management system, and spontaneously performs the activities based on his/her awareness of knowledge on and ability in environmental matters. For the purpose of training human resources who can implement the above, we have established an organized environmental education and training system shown in the figure and are implementing the system.



For Headquarters or each related company, we have established "general education", which each employee is to receive, as fundamental education. Further, we have constructed an environmental education and training system by level, workplace, and activity.

Mabuchi Motor provided general education for all the employees of its group companies (approx. 56,000 employees) in fiscal year 2003 through the above-mentioned Mabuchi Group environmental education system. In addition, we also carried out special environmental education for limited employees.



General environmental education for employees (Hong Kong Mabuchi)



Seminar for internal environmental auditors given by an outside lecturer (at Headquarters)



Training at Headquarters on how to respond to an emergency to facilities that might cause any environmental burden

Mabuchi Motor is trying to help all employees understand the necessity of global environment preservation, requirements of the environmental policy and ISO14001, and action to be taken in the event of emergency through implementation of such education and training.



Environmental Accounting

Mabuchi Motor introduced the environmental accounting system as a tool that enables management to evaluate environmental management.

Concept of environmental accounting

In fiscal year 2003, Mabuchi Motor introduced the environmental accounting system as an important tool that enables management to evaluate the environmental management and supports managerial decision-making. Our environmental accounting is based on the "Environmental Accounting Guidelines (2002 edition)" announced by the Ministry of the Environment. We will positively disclose the information about the environmental accounting and use it to promote the environmental management.

Report on environmental accounting activities in fiscal year 2003

Mabuchi Motor has groped for a method for grasping environmental cost by activity as a base for evaluating activities to address environment problems. To embody and realize it, we have made efforts to establish the environmental accounting system with the support of and guidance of Shin Nihon & Co.

For fiscal year 2003, we applied the environmental accounting mainly to calculation of amounts of investment and cost by activity to preserve environment carried out by Headquarters (including Technology Center; herein-after the same).

Analysis of calculation result through environmental accounting for fiscal year 2003

In fiscal year 2003, Headquarters' investment and cost for environmental preservation amounted to 42.6 million yen and 813.0 million yen, respectively. All Mabuchi brand motors are manufactured by overseas related companies. The main operations of Headquarters are research and development and umbrella administration of related companies. Therefore, the research and development cost accounts for 71.9 percent of the whole environmental preservation cost.

The large part of the research and development cost is used to reduce and eliminate hazardous chemical substances such as lead, cadmium, and hexavalent chromium in the process of product design and to produce smaller dies. The environment-related research and development cost accounts for 15.7 percent of the aggregate research and development cost (3,714.9 million yen) for the same year.

As environment-related investment, 17.4 million yen was used to preserve global environment including introduction of hydrocarbon scrubbers, and 23.3 million yen was used to deal with environment damage for the purpose of immediately reducing the contamination of soil and ground water found through voluntary examinations (see

relevant page 24 of this Environmental Report).

The environmental preservation effects in Mabuchi Group's business activities have reduced water input and usage of PRTR substances. Although the energy input and emissions of CO₂ and waste increased, the amounts per one million motors produced decreased.

Schedule

We will globally expand the scope of calculation by applying the environmental accounting system to overseas related companies in a gradual manner. We will also make efforts to more precisely grasp the cost and effect of the environmental preservation and start calculation of economic effect resulting from environmental preservation measures.



Prior examination of Headquarters' environment-related facilities conducted by Shin Nihon & Co.



Environmental preservation cost

(yen in millions)

Classification		Amount of investment	Amount of cost	Main efforts	Relevant page of Environmental Report
(1) Cost within business area	Pollution prevention cost	1.9	3.3	Countermeasures against exhaust gas of diesel cars, check and measurement of septic tanks, and water quality analysis and washing of waste agent tanks	—
	Global environmental preservation cost	17.4	21.8	Introduction of energy-saving vehicles, energy saving by using ice storage tanks, and introduction of hydrocarbon scrubbers	P16, 18
	Resources recycling cost	0.0	11.0	Recycle and proper treatment of emissions	P25
	Subtotal	19.3	36.1		
(2) Upstream and downstream costs	0.0	15.0	Recycle and proper treatment of packing materials	P25	
(3) Management activity cost	0.0	117.0	Maintenance and operation of environmental management system, examination and analysis of contained chemical substances, disclosure of environmental information, environmental education for employees, and the like	P9 - 12, 15, 23, 26	
(4) Research and development cost	0.0	584.7	Reduction and abolition of use of hazardous chemical substances such as lead, cadmium, and hexavalent chromium as well as research and development for downsizing dies	P17, 18, 20	
(5) Cost for remedying environment damage	23.3	60.2	Examination and cleaning of soil and ground water	P24	
Total		42.6	813.0		

Environmental preservation effects

Details of effects		Classification of indicator	Value of indicator for fiscal year 2002 (basic unit)	Value of indicator for fiscal year 2003 (basic unit)	Value of indicator compared with the preceding fiscal year (basic unit)	Relevant page of Environmental Report
(1) Effects corresponding to cost within business area	1 Effects on resources input to business activities	Energy input (GJ) (GJ per million units)	989,555 (582)	1,011,221 (555)	Increase by 21,666 GJ (Reduction by 27 GJ per million units)	P19, 20
		Water input (10 thousand tons) (10 thousand tons per million units)	142 (0.083)	136 (0.075)	Reduction by 60,000 tons (Reduction by 80 tons per million units)	P19
		Usage of PRTR substances (tons) (tons per million units)	2,972 (1.7)	2,627 (1.4)	Reduction by 345 tons (Reduction by 0.3 ton per million units)	P23
	2 Effects on environmental load and emissions from business activities	Amount of emissions (tons) (tons per million units)	39,603 (23.3)	39,676 (21.8)	Increase by 73 tons (Reduction by 1.5 tons per million units)	P25
		Amount of emitted CO ₂ (tons) (tons per million units)	172,092 (101.3)	173,733 (95.4)	Increase by 1,641 tons (Reduction by 5.9 tons per million units)	P21, 22

Basic points of Mabuchi Motor's environmental accounting

- Period:
January 1, 2003 through December 31, 2003
- Scope of calculation:
Cost: Headquarters (including Technology Center)
Effect: Mabuchi Group
- Standard for calculating environmental preservation costs
 - Depreciation cost
The depreciation cost in terms of financial accounting is reported.
 - Labor cost
All labor costs relating to the environmental protection activities are calculated.
Formula: number of operations x hours per operation x average wage by site
- Research and development cost
Costs specific to individual research and development themes are individually calculated. Those that cannot be directly grasped are proportionally calculated according to working hours by theme.
- Standard for reporting compound costs
Only the costs relating to environmental protection activities are reported in accordance with "Environmental Accounting Guidelines (in 2002)."



Green Procurement and Green Purchase

Mabuchi Motor purchases parts and raw materials necessary for production and office supplies that contain no or little environmental load causing substance.

Control of environmental load causing substances in purchasing

Mabuchi Motor established the green procurement system in fiscal year 2000 and has operated it since then to purchase parts and materials free from hazardous substances. When purchasing parts and materials, Mabuchi Motor puts a priority on suppliers that are carrying out environmental protection activities in a convincing way.

Basically, we specify chemical substances that must not be contained in parts, materials, and packaging materials, present them to suppliers to control inclusion of them in parts and materials to be purchased.

In addition, we ask suppliers to clarify all the chemical components used for parts and materials to be purchased and examine whether environmental load causing substances are contained in them or not.

Our design departments are reviewing the results of the examination. If any part or material to be purchased contains any prohibited substance out of the environmental load causing substances or if it contains any regulated substance more than its permissible concentration, the part or material is unprocurable.

Besides, for any part or material accepted, our chemical substances control system is grasping the type and content of each chemical component used for the part or material. We are using these data for green procurement and green purchase activities.

Promotion of Green Purchase of Office Supplies

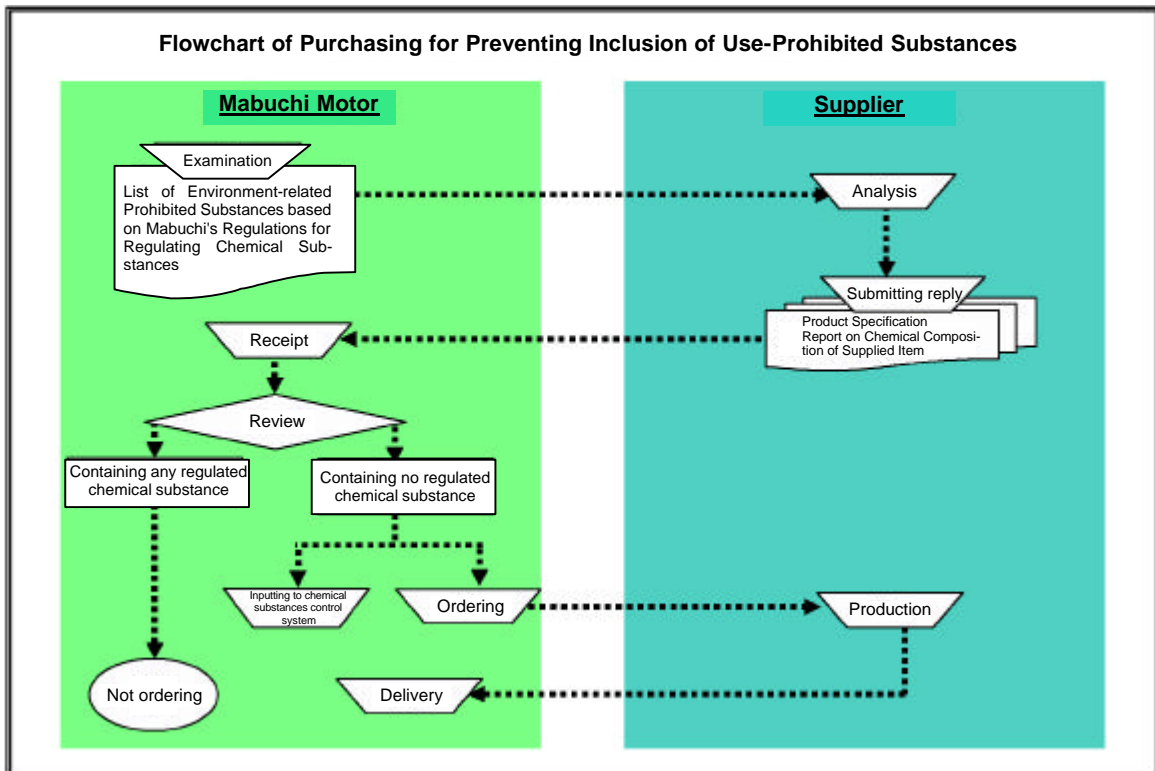
Regarding purchase and lease of office equipment and office supplies, Mabuchi is generally considering various environmental impacts and promoting purchase and lease of articles having few environmental loads.

Headquarters has OFFICE SUPPLIES CENTER (OSC), an in-house unmanned office supplies provision and control system, and is promoting green purchase also for stationery and office supplies to be handled with OSC.

At present, we procure slightly more than 60 percent of the stationery and office supplies used at Headquarters through green purchase.



In-house unmanned office supplies provision and control system (Headquarters)





Green purchase applied to the new office building

Mabuchi Motor started construction work of the new office building in May 2003. We design the building, use materials, and carry out construction work based on environment-conscious principles. (See “New Headquarters of Mabuchi Motor Evolving with the Times” described on pages 7 and 8 of this Report.)

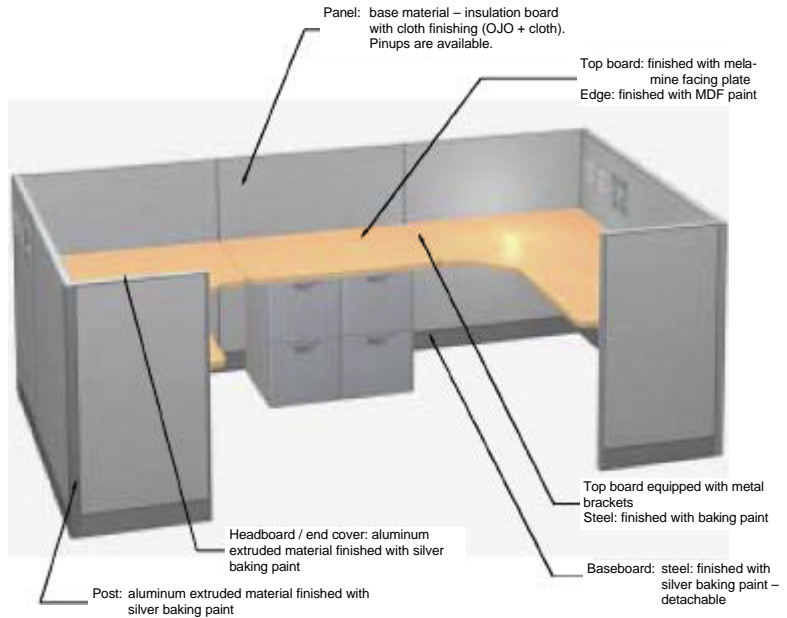
We will move to the new office building in October 2004. Taking this as a good opportunity, we will replace all office furniture (desks, chairs, cabinets, etc.) and employee uniform with new ones. When purchasing the new furniture and uniforms, we chose suppliers and products according to our green purchase standards.

The office furniture of our choice meets the following green purchase standards:

1. User-friendly ergonomic design and function
2. Use of recycled materials
3. No use of hazardous substances



Environment-friendly office furniture to be used at the new office building



4. Easily recyclable design when disposed of
5. Generation of no hazardous substance while being used
6. Long life
7. Suppliers’ recycle systems must be established.

Uniform made of ecological materials

Mabuchi Motor chose a design of the new employee uniform suitable to its spirit – second leap toward the 21st century – based on the above-mentioned standards.

The uniform is made of “pulper eco MIX,” a blend of cotton and polyester 85 percent of which is threads made from recycled PET-bottles. It is said to have an antistatic property, a pleasant texture, and continuous freshness.

Purchase of environment-friendly company automobiles

At present, approx. 20 percent of the company automobiles (5 out of 26 automobiles) are environment-friendly hybrid automobiles that reduce exhaust gas and CO₂ emissions by using electricity in combination with gasoline. We will continuously exchange the existing automobiles with hybrid ones.



Hybrid automobile



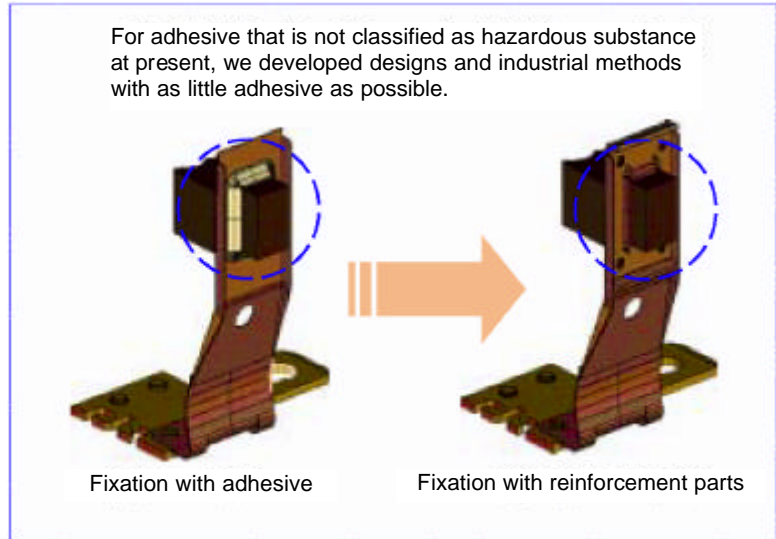
Production of Environment-Friendly Motors

Mabuchi Motor positively addresses environmental problems in its own business – development and production of small motors.

For research and development, and production of small motors, Mabuchi Motor addresses environmental problems – reduction of environmental load causing substances and saving of resources and energy – with its own technological skills pursuant to one of its management guidelines, “Promote corporate activities based on minimization of environmental load and pursuit for safety.”

Reduction of environmental load causing substances contained in products

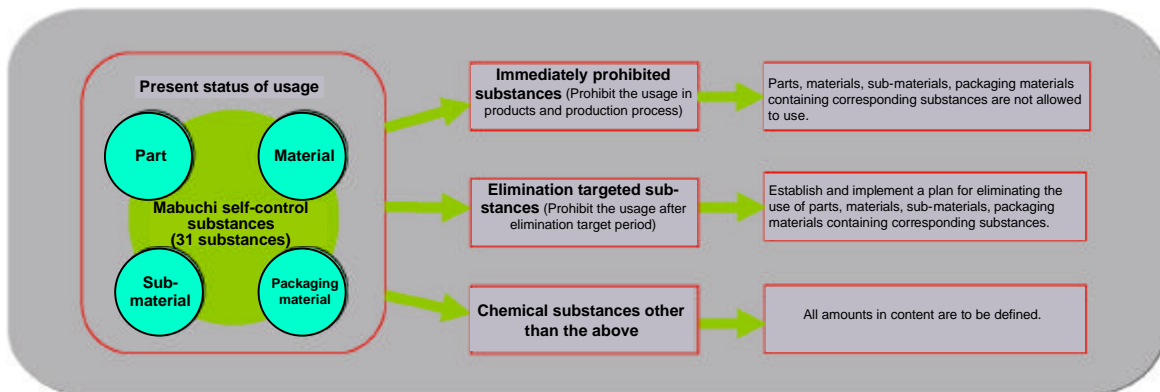
Mabuchi Motor addresses environmental problems based on (1) its environmental policy, (2) requirements from customers, and (3) Mabuchi Motor’s own regulations (to which laws and ordinances and requirements from customers are incorporated: see the chart below). At present, the requirements from customers mainly consist of the following deadline-specified EU (European Union) Directives: “ELV Directive (legal regulations on end-of-life vehicles),” “RoHS Directive (legal regulations on restriction of hazardous substances),” and “WEEE Directive (legal regulations on waste electric and electronic equipment). The RoHS Directive will prohibit the use of hazardous substances such



as cadmium, lead, hexavalent chromium, mercury, and specific brominated flame retardants in July 2006. To reduce the usage of hazardous substances is an obligation that manufacturers should fulfill as a matter of course. Mabuchi Motor, which regards this directive as a minimum standard with a time deadline, started to positively address this issue several years ago. We have not used mercury from the beginning and have completed technical evaluation for cadmium, lead, and hexavalent chromium. We can replace them with alternative substances as soon as we obtain customers’ approval.

In addition, Mabuchi Motor makes efforts to reduce, at its own discretion, hazardous substances such as PVC (polyvinyl chloride) and methylene chloride, which are not yet legally regulated.

Mabuchi Motor changed its approach in the autumn of 2003. Before then, we had mainly responded to requirements from customers. Since then, we have taken the initiative in making proposals of environment-friendly motors.





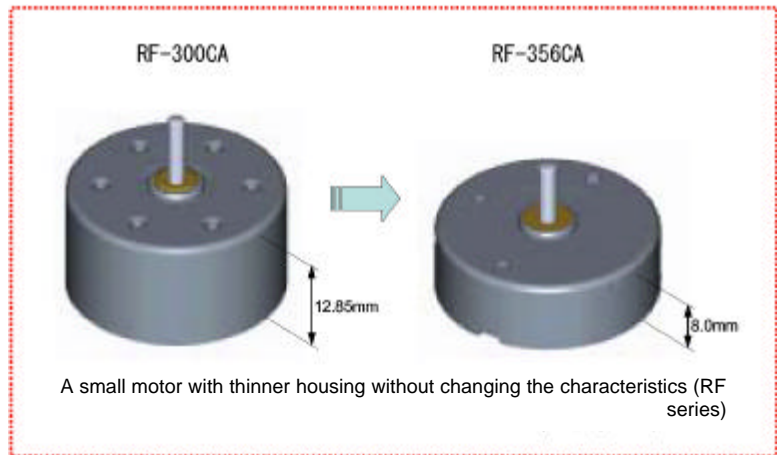
Saving and recycling of energy and resources

Promotion of saving of energy and resources is also an important environmental preservation approach. Mabuchi Motor believes that development of environment-friendly motors mainly based on the concept of environmental preservation is the mission of its designers.

Mabuchi Motor makes efforts to save resources and energy by developing motors with the same or higher-quality torque by taking into account change of metal materials, weight saving, downsizing of components, decrease in the number of components, and reduction of man-hours (energy saving in terms of manpower and facilities).

For example, plating had been applied to tacks that are used to fix components. First, we changed the substances of the plating to non-hazardous substances. At present, we remove the tacks themselves, which leads to reduction of the number of components and man-hours for fitting them by “caulking press-fitting method.” As a result, the weight of the whole motor decreased, realizing saving of resources by approximately 0.3 percent per motor.

Improved efficiency and performance



of motors lead to reduction of power consumption, enabling customers to save energy when they use the motors. We realized efficiency improvement by 3-5 percent on the average for new models in 2003. We need to have the viewpoint of good recyclability from now and will make further efforts in development.

Environment-friendly production process

We are promoting non-cleaning process and cleaning process with alternative substances in order to reduce trichloroethylene that is conventionally used for cleaning in the motor production process.

By doing this, we intend to prevent air and water contamination and improve operators' working environment. We introduced hydrocarbon scrubbers into the processes to which it is difficult at present to apply the non-cleaning method from the viewpoint of quality assurance.



Hydrocarbon scrubber introduced in fiscal year 2003 (Hong Kong Mabuchi)



The 21st century is called the century of the environment, and environmental problems are highly publicized around the world. I believe that we should take the initiative in dealing with environmental problems, rather than doing so because somebody tells us to do so. Measures for environmental preservation often require larger cost at present, but this is temporal. Such measures will eventually result in saving of energy and resources. I think measures for environmental preservation will be indispensable for future management.

Akira Okazaki (Manager of ECO-Motor Design Group (EMD Group))



Efficient Use of Resources and Energy

Individual overseas related companies of Mabuchi Group make efforts in saving various resources and energy used in their corporate activities.

Effective use of water resources

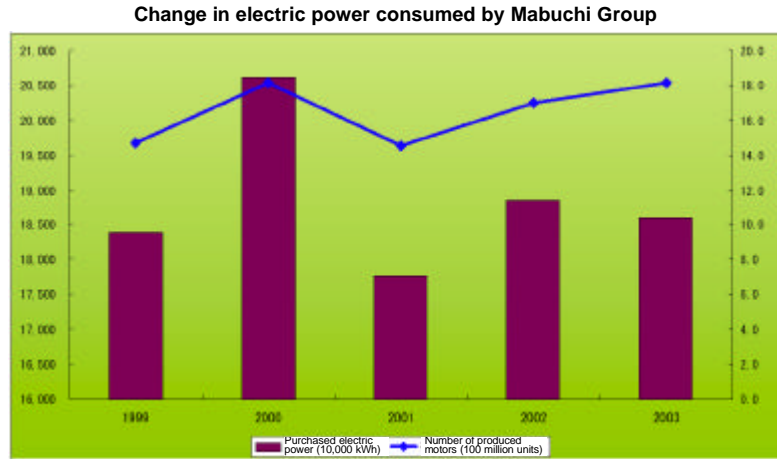
Mabuchi Motor values water resources and uses rainwater in a positive manner.

Its Headquarters, which started to use rainwater 18 years ago, had used rainwater of 267,000 tons in total up to fiscal year 2003.

In recent years, individual group companies have also been using rainwater in a positive manner.

Dalian Mabuchi constructed a facility for collecting rainwater and uses the collected rainwater in place of tap water in its production process. In 2003, approximately 60,000 tons of rainwater was used in place of tap water.

In 2003, Hong Kong Mabuchi, situated in Guangdong Province of China, established and began to operate "wastewater treatment facility" in its Guangdong Factory 1 for treating wastewater it discharged. Part of the wastewater treated by the facility is reused as wash water for toilets in the factory. In fiscal year 2003, 100,000 tons of treated water was



reused to reduce the use of tap water.

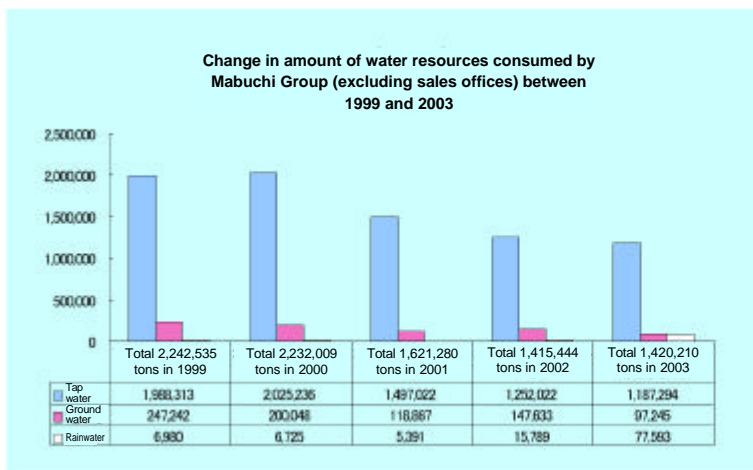


Wastewater treatment facility constructed in Guangdong Factory 1 (Hong Kong Mabuchi)

Saving of electric power energy

Jiangsu Mabuchi is situated near Shanghai. Because of the climate, it needs to use air conditioning equipment to lower the indoor temperature of its restaurant for factory employees during summer.

In 2003, Jiangsu Mabuchi requested a specialized vendor to apply special insulating layers on the ceiling of the restaurant to reduce electric power consumption, which lowered the indoor temperature by maximum 3.7 degrees C during the high-temperature season. As a result, the electric power consumed by the air conditioning equipment of the restaurant during the year could be reduced by 30 percent.



Before modification work



After modification work

Insulating layers on the ceiling (Jiangsu Mabuchi)



Efforts to reduce environmental load in the production process

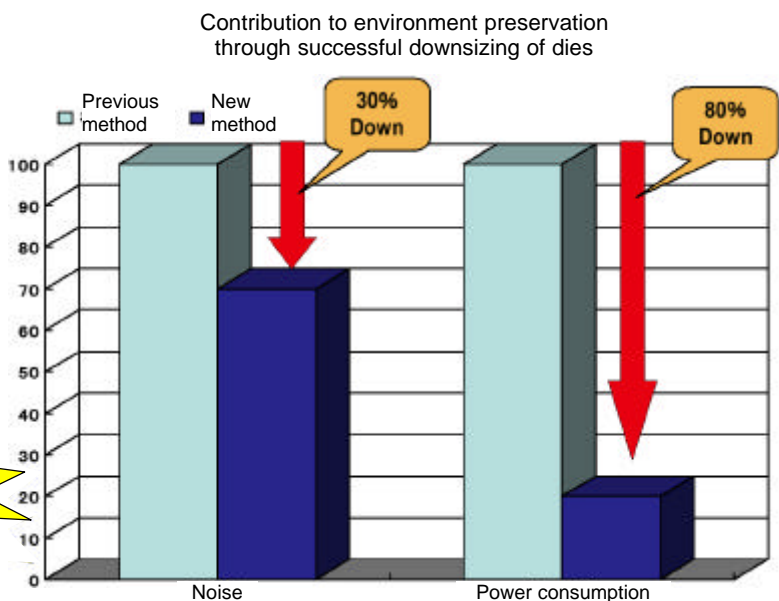
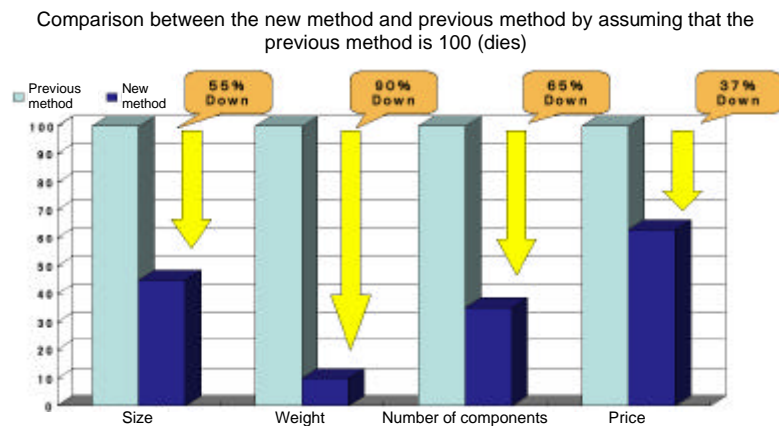
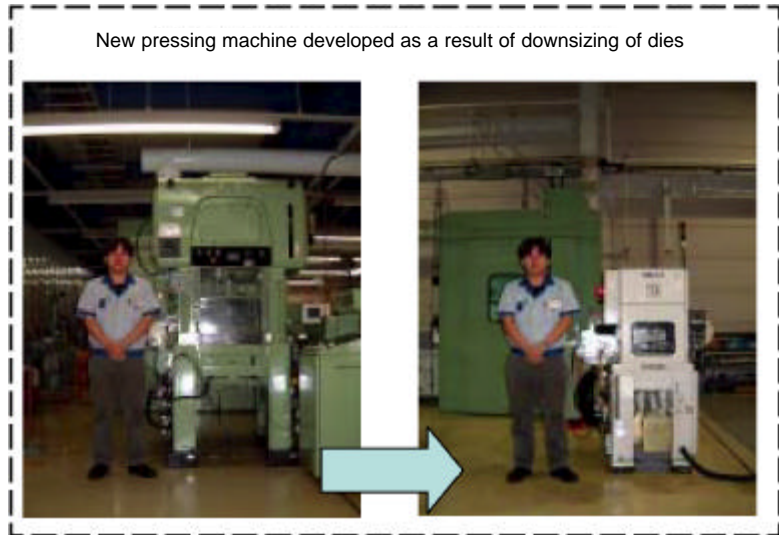
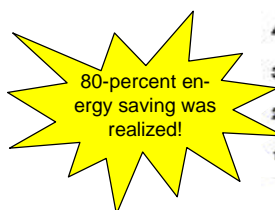
Employees of our production sites made efforts to reduce environmental load by developing smaller dies.

Downsizing of dies and pressing machines for producing small precision components for motors made it possible not only to improve accuracy, save space, save weight, and reduce facility costs but also to save resources by reducing the number of parts of dies, save energy by appropriately setting pressing capability, and save manpower by improving production capability.

In comparison with the previous method, the new method realized reduction of dies by approx. 55 percent in size (capacity), approx. 90 percent in weight, approx. 65 percent in number of components, and 37 percent in price (see the right graph). The new method reduced pressing machines by approx. 90 percent in required capability, approx. 85 percent in weight, and 36 percent in price.

Such development efforts almost doubled the productivity and reduced noise, component cost, floor area required to install them, and power consumption by approx. 30 percent, 12.5 percent, approx. 75 percent, and approx. 80 percent, respectively.

In addition, the production period of dies could be shortened, and pressing machines, which had needed to be installed on the ground floor before, could be installed on the 2nd and 3rd floors. This made it possible to take flexible production scheme.





Efforts to Reduce CO₂ Emissions

All the employees of Mabuchi Motor make efforts to “reduce CO₂,” one of the environment load causing substances, in production and sales of small motors.

Prevention of global warming

Today, prevention of global warming is a common challenge for all companies, bodies, public organizations, local governments, and individuals.

Mabuchi Motor – not only its Headquarters but also overseas related companies – is exerting every possible effort to reduce CO₂ emissions.

Mabuchi Motor emits no greenhouse gas directly from its production process. All its CO₂ emissions result from energy consumption. It mainly consumes electricity that accounts for 85 percent of all energy consumption. Therefore, reduction of electric power consumption is a big challenge to Mabuchi Motor.

For this purpose, Mabuchi Motor has promoted major changes such as integration of production factories and reorganization of production areas, which have brought about great success. However, there are not so many major changes that bring about such great success. Mabuchi Motor positively takes measures that might produce even small and tiny effects.

Mabuchi Motor will review individual production equipment, improve distribution efficiency, and make individual employees promote energy-saving activities. If even a little energy is wasted, we will remedy the situation to reduce CO₂ emissions.

Activities to reduce CO₂ emissions in the distribution process

Mabuchi Motor’s distribution department also makes efforts to reduce CO₂ emissions.

1. Less transport distance of products

Overseas related companies’ products to be sent to customers in Japan had been first carried into Headquarters and then transported by land. For some customers located in Kansai area, we began to use Kobe Port and Kansai Airport for the purpose of reducing CO₂ emissions.

Consequently, in comparison with transportation via Headquarters, CO₂ emissions have decreased by 16 percent (299 kg for transportation per cargo of 1 ton) for air cargo transportation and by 81 kg per ton for transportation by ship.

2. Reduction of dedicated vehicles

The distribution department, which possessed six vehicles dedicated to Headquarters (for direct shipment) to keep the deadline regardless of the amount to be delivered, has reduced the number of the vehicles to two (one for internal use and the other for external use) and tried to heighten load efficiency of the transport vehicles by consigning them to outside carriers every time when it has small amount to be transported.

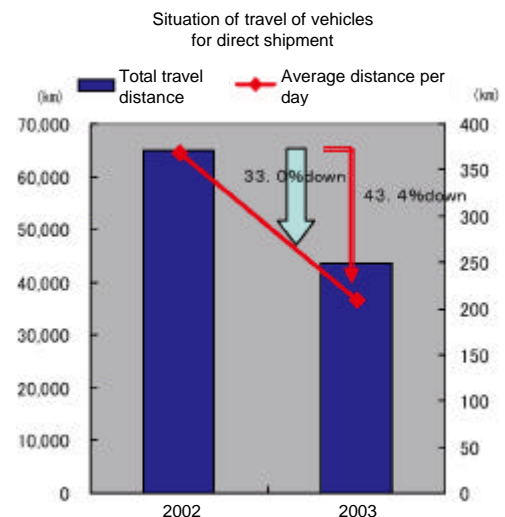
As a result, the department could reduce the travel distance (or CO₂ emissions) by approx. 30 percent.



Significant improvement in load efficiency (Headquarters)

3. Introduction of electric forklifts

The distribution department had promoted shift from diesel forklifts that consumed light oil to electric forklifts and completed the shift in 2002. One diesel forklift emitted 2.53 tons of CO₂ (in terms of fuel) annually.





On the other hand, one electric forklift emits 1.1 tons of CO₂ annually. This means CO₂ emissions were reduced by 56.5 percent.



Electric forklift (Headquarters)

4. More efficient handling of packing materials

The distribution department of Headquarters collected styrene foams used as packing materials and made subcontractors recycle them. For styrene foams from customers in Chubu area, the department requested local recycling companies in Aichi and Shizuoka Prefectures to collect and recycle them for the purpose of reducing CO₂ emissions generated through their transportation.

5. Promotion of idling stop

The department put signs of idling stop at conspicuous places within Headquarters for enlightenment.



Sign of idling stop (Headquarters)

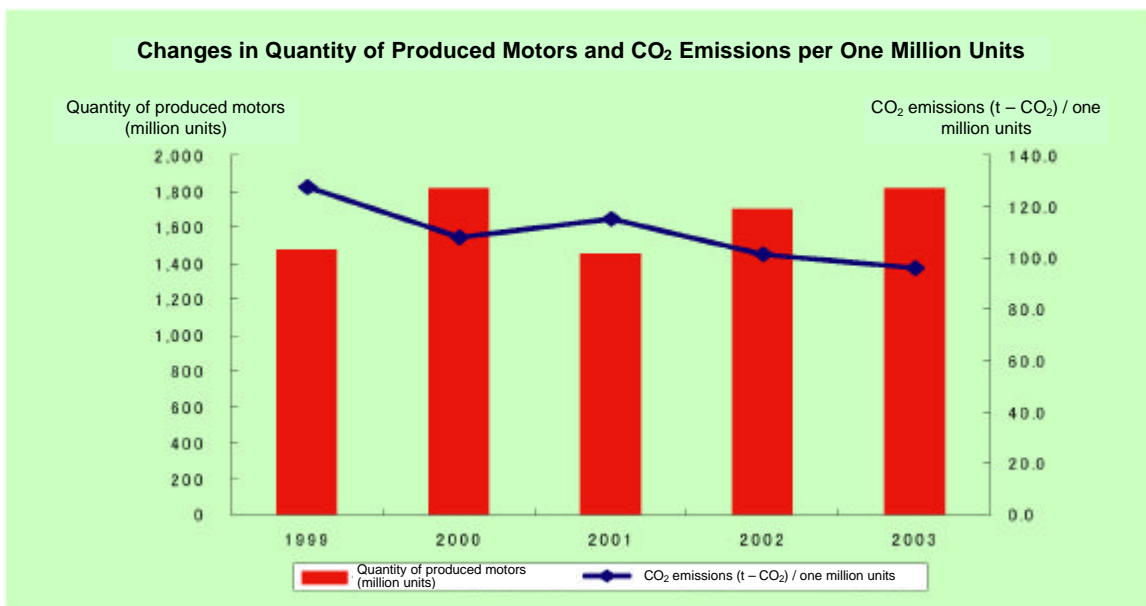
Overseas related companies' activities to reduce CO₂ emissions

In order to reduce CO₂ emissions, individual overseas related companies of Mabuchi Motor take ingenious measures to reduce consumption of power electricity, which is the main energy source.

For example, Vietnam Mabuchi installed sprinklers to spray rainwater over the roof of its restaurant in order to reduce consumption of power electricity used for air conditioning of the restaurant. Use of the sprinklers made it possible to lower the indoor temperature of the restaurant by approx. 5 degrees C. Calculation indicates that this saved 477 kWh of electricity per day and approx. 143,000 kWh of electricity per year.



Electricity saving realized by spraying water over the roof (Vietnam Mabuchi)





Management of Chemical Substances

Mabuchi Motor thoroughly manages chemical substances to prevent environmental contamination.

Proper management of chemical substances

Mabuchi Motor identifies restricted chemical substances for inclusion and use in parts, materials, sub-materials, packaging materials, etc. used in products and production process and grasps how they are used. At the same time, Mabuchi Motor actively makes efforts to reduce and eliminate hazardous chemical substances.

In addition, Mabuchi Motor also establishes regulations and procedures on transportation and storage of chemical substances that are used in research and development of products and equipment as well as in production process to manage chemical substances to prevent them from contaminating global environment such as soil, water, and air.

Management at production site

Overseas related companies have introduced vehicles dedicated to transportation of chemical substances. The vehicles are leak-proof to minimize environmental contamination in case of emergency.



Vehicle dedicated to transportation of chemical substances (Hong Kong Mabuchi)

For the floor of warehouses in which chemical substances are stored, special coating is applied to prevent infiltration of liquids and contamination of soil and water in case of liquid spill.



Floor coated to prevent liquid spill (Dalian Mabuchi)



Management of oils (Jiangsu Mabuchi)

Production sites carry out the following measures for storage and management of chemical substances:

1. To put drum cans on oil pans to prevent liquid spill, determine how to respond to emergency, and carry out periodic drills for emergency
2. To prevent contamination due to oil spill and manage them according to treatment procedures set by type of oil



Implementation of drill for emergency (Vietnam Mabuchi)

Research and Development Department's management of chemical substances

Mabuchi Motor's research and development department manages chemicals used for research and

development, test and the like of products and equipment as follows:

1. To set procedures for storage and management of chemicals for their management
2. To install chemical storages in the earthquake-resistant manner
3. To assign responsible managers for storage of chemicals and take periodic inventory
4. To treat liquid waste chemicals according to the manifest system



Earthquake-resistant chemical storage (Headquarters)

PRTR Law and Mabuchi Motor

Since 1998, Mabuchi Motor Headquarters has been conducting surveys and reports in accordance with PRTR (Pollutant Release and Transfer Register).

We had no chemical substances to be reported in 2003, for the amounts of the specified chemical substances we handled were all under the report-required levels.

We further continue to be committed to activities to reduce harmful chemical substances and maintain and improve the control system.

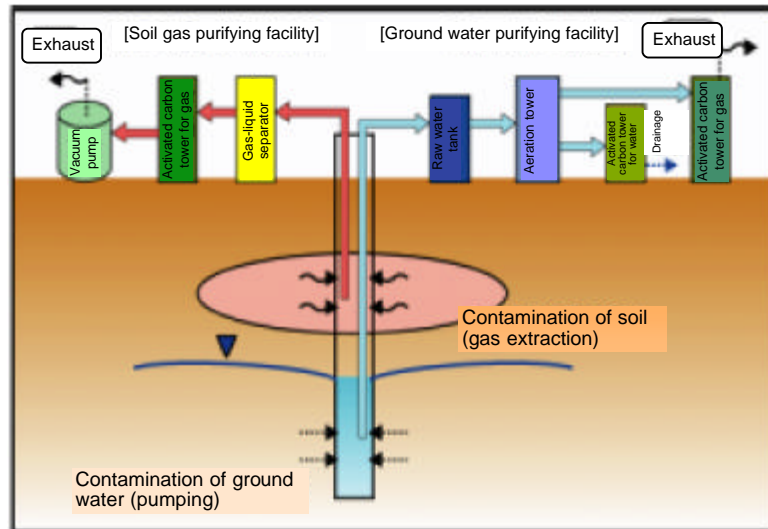


Countermeasures against Contamination

Mabuchi Motor examines and analyzes contamination of the soil and water and takes appropriate measures.

Purification and recovery of contaminated soil

Mabuchi Motor carried out prior soil survey in July 2002 associated with starting construction work of Headquarters' new office building. As a result, tetrachloroethylene and trichloroethylene exceeding the environmental specified values were detected near the place that had been used as a cleaning room. We carried out more detailed investigations on materials, surface layer gas, soil survey by boring, and ground water survey to identify the scope of contamination in accordance with "Guidelines for Investigation and Countermeasures for Soil and Ground Water" (issued by the Ministry of the Environment in 1999) and reported the above to Matsudo City. Regarding the contaminated area, the contamination level of which exceeded the specified level, according to instructions from Matsudo City, we are cleaning and recovering the upper surface of ground water by soil excavation method and contaminated part under the ground water surface by vacuum gas extraction method and ground water withdrawal aeration activated coal treatment method.



Flow of double extraction method

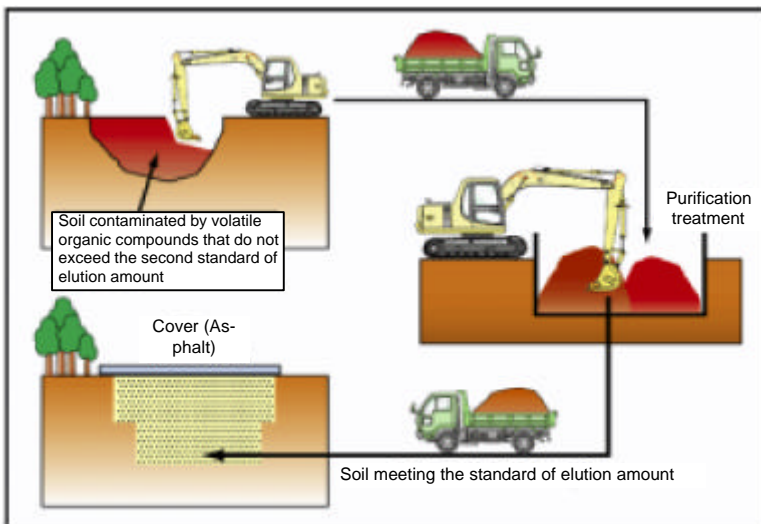
We will demolish buildings in this district and further promote purification of any uncleaned part by completion of the new Headquarters building. We will build parking lot and a reservoir in this district.

Situation of other business establishments

Mabuchi Precision Industries Ltd. (Tatebayashi-shi, Gunma-ken), one of

Mabuchi Motor's related companies, stopped its operation in November 2002 to transfer its production operation overseas. Taking this opportunity, we made investigation to check whether the soil in its premises was contaminated because Mabuchi Precision Industries Ltd. used chlorinated organic compounds to clean precision components.

As a result, we found that the area in which cleaning machines had been placed were contaminated by tetrachloroethylene and immediately reported the investigation result to Gunma Prefecture and Tatebayashi City. The municipalities investigated well water in the surrounding area and, fortunately, confirmed no expansion of contamination outside the premises. For the way of purifying the soil and ground water, we are discussing with the municipalities and trying to find the best way.



Soil drilling and purification treatment



Reduction and Recycle of Wastes

Mabuchi Motor endeavors to reduce and recycle wastes generated from its business activities to reduce environmental load.

Mabuchi Group's Waste amount generated

The waste discharged by the whole Mabuchi Group amounted to 39,676 tons in fiscal year 2003, down 6,310 tons (13.7%) from that in fiscal year 2000. Mabuchi Group reduced the waste amount per one million motors by 14.2 percent.

Recycling rate of Mabuchi Group

Mabuchi Group recycled 95.2 percent of the whole discharged waste and its wastes decreased to 1,872 tons in fiscal year 2003. In fiscal year 2002, the wastes amounted to 3,809 tons and the recycling rate was 90.3 percent. These mean that Mabuchi Group reduced wastes by approx. 50 percent and raised the recycling rate by 5 percent. Recycle of waste plastic seems to have significantly contributed to this improvement.

For treatment of raw materials of motors, we looked for processors that classify parts by material before disposal. In Japan, we contract out the operation to two processors. Recyclable materials differ depending on countries, so we are looking for recycling operators at present.

We set the target recycling rate at 98 percent and 100 percent (zero emission) for fiscal years 2004 and 2005, respectively.

Further recycling efforts by carrying out thorough separation

We will promote thorough separation of wastes to further recycle and reduce wastes. We make efforts to prepare visible separation panels, establish places for wastes, and look for and manage processors.

for walls as recycled foamed materials. Aiming at eliminating styrene foams, individual overseas related companies repeatedly use returnable containers (pet trays, pulp molds, etc.) with guidance from "Packaging Committee." In addition, wooden pallets used to pack products from overseas are reused at Headquarters.



A truck dedicated to steel recycling (Hong Kong Mabuchi)



Recycle of styrene foams (Headquarters)

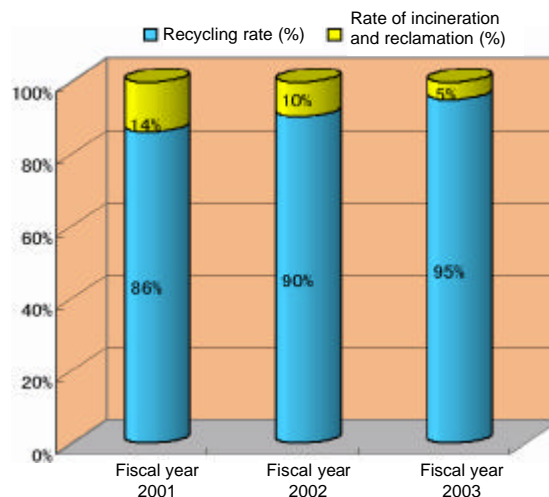
Recycling activities in distribution process

Mabuchi Motor retrieves cardboard boxes, styrene foams, vinyl sheets, etc. upon delivery to some customers and separates and recycles them. Cardboard is recycled and used as waste paper, while styrene foams are recycled and used for heat insulation



Recycle of cardboard (Jiangsu Mabuchi)

Change in Recycling Rate of Wastes in Mabuchi Group





Communication

Mabuchi Motor tries to disclose to the public its environmental philosophy, environmental management activities, and environmental information in various ways to communicate with individual stakeholders.

Environmental information release to society

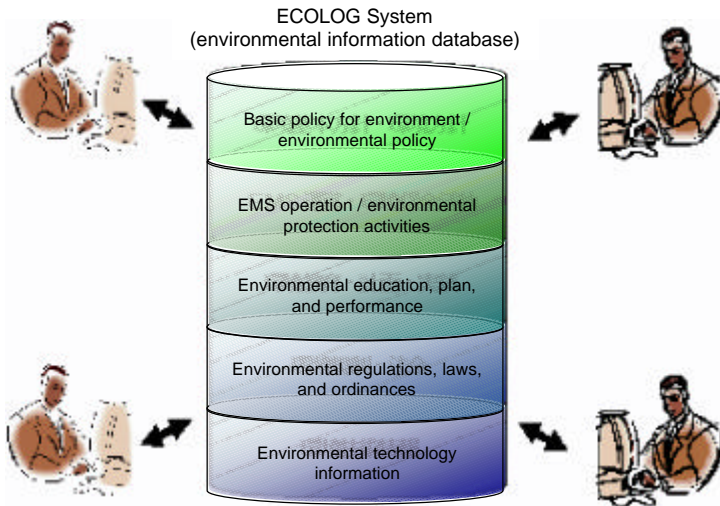
Mabuchi Motor website contains environmental information, together with the outline of Headquarters and overseas related companies, product information, and investor relations, to disclose its efforts toward environmental problems. Thus Mabuchi Motor endeavors to internally carry out enlightening activities and disclose information to the public. Mabuchi Motor's Website URL: <http://www.mabuchi-motor.co.jp>

Issuance of Environmental Report

Mabuchi Group has issued "Environmental Report" every year since 2001 and also placed it on the website. Four overseas related companies have also issued the report since 2003. Mabuchi Group will try to issue better "Environmental Report" by sharing the same environmental consciousness. For that purpose, we appreciate impressions, opinions, and critiques about it from the readers. Please let us know those of yours (to the contact point on the last page).



Mabuchi Motor Environmental Reports



Birth of information database "ECOLOG"

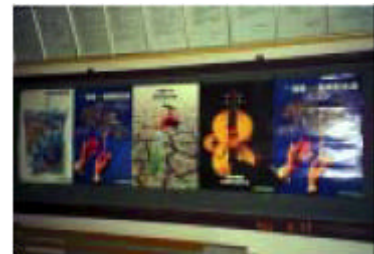
Headquarters established a database called "ECOLOG" within in-house intranet as a channel of internal enlightening activities.

The database contains Mabuchi Motor's environmental philosophy, basic policy for environment, environmental regulations, environmental targets, education, plan, and performance as well as internal and external environmental information. ECOLOG enables individual employees to easily access environmental information and is always updated and managed for realizing common understanding among them.

Although ECOLOG is applied only to Headquarters at present, we intend to extend it to overseas related companies and are now making the preparations.

Enlightening activities conducted by overseas related companies

Dalian Mabuchi and other individual overseas related companies also actively carry out enlightening activities by displaying posters and environmental goals on the walls of corridors through which employees walk.



Signs for environmental enlightening activities (Dalian Mabuchi)



Environmental Reports issued by overseas related companies



Mabuchi Motor's Contributions to Society

Mabuchi Motor's management philosophy is "Contributing to international society and ever-expanding our contribution." "Contributions to society" is the fundamental sense rooted in all its activities.

Today, companies must incorporate social fairness, contributions to society, and consideration of environmental problems into their daily management activities and behave in a responsible manner for not only their stockholders and customers but also diverse stakeholders such as local communities and employees. Mabuchi Motor's management philosophy is "Contributing to international society and ever-expanding our contribution." "Contributions to society" is the fundamental sense rooted in all its activities.

Contributions to society as a manufacturer

Mabuchi Motor, as a motor manufacturer, helps people make their life safer and more convenient through manufacturing motors. In addition, we stabilize and improve people's lives in regions (countries) by hiring many employees there. It is needless to say that tax payment is one of such contributions.

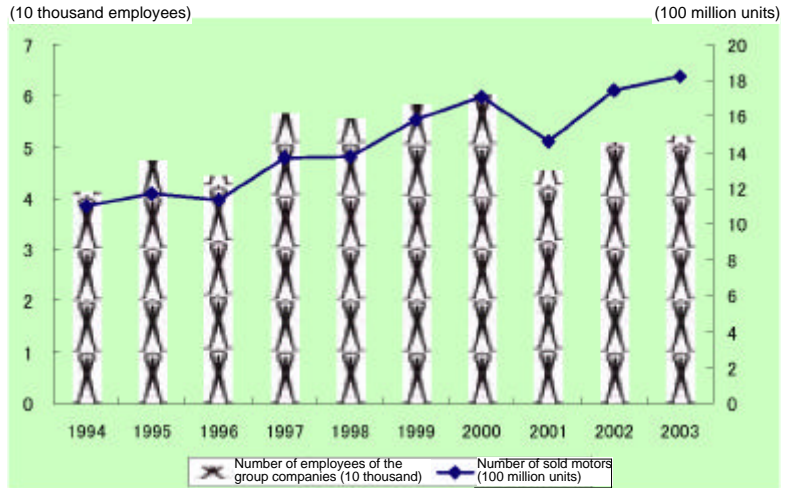
1. Contribution to society by manufacturing and selling motors

Our motors are used in a wide range of products such as toys, home appliances and power tools, audio and visual equipment, information and communication equipment, and automotive products. Our motors contribute to safer and more convenient life.

2. Contribution to society through employment

Mabuchi Motor, which has established overseas bases one after another since it established Hong Kong Mabuchi in 1964, has worked with local employees to contribute to the local development.

Changes in number of sold motors and number of employees



Mabuchi Motor is driving economic development of the countries into which it expanded its business by promoting employment and tries to improve the technology level there through technology transfer.

3. Contribution to society through tax payment

Mabuchi Motor's Headquarters and individual overseas related companies try to improve performance and pay a large amount of tax. In 2003, Dalian Mabuchi won official commendation as an excellent tax-paying company.



Plate certifying that Dalian Mabuchi is an excellent tax-paying company

Communication activities

Mabuchi Motor's Headquarters has cosponsored (supported with grants-in-aid) Technical College Robot Contest

and ABU Robot Contest as support for young engineers who will lead the next generation as well as an activity to promote scientific development. It also helps operation of the contests and provides motors. Although it is lamented that young generation does not put emphasis on science and science-related subjects, those who participate in the robot contests get stars in their eyes, from which we expect coming of the new era.

"More relaxed education" provides pupils with opportunities for having company tours (Mabuchi Motor had nine tours with 64 pupils in total in 2003). Unfortunately, all Mabuchi



Children gazing intently at workpieces with motors (Shizuoka Hobby Show in 2003)



President Kamei presented Mabuchi Award to the winner at the 2nd ABU Asia Pacific Robot Contest (at Bangkok of Thailand in August 24, 2003)



Employees of Taiwan Mabuchi visited solitary old people.

Motor's production sites were transferred overseas. Therefore, we display customers' products with built-in motors at Headquarters. We let visitors see videos that show production process and principle of motor operation and answer their various questions. As a souvenir, visitors receive "Motorization Guide" that contains many examples of workmanship with motors. Mabuchi Motor will publicize the pleasure of manufacturing through such interaction, Shizuoka Hobby Show in spring, and Plastic Model and Radio Control Model Show in autumn.

Contributions to society made by overseas related companies

Dalian Mabuchi has made supportive activities such as establishment of elementary schools and improvement of their facilities since 1996. It holds factory tours for sixth-grade children of elementary schools every year and, at the same time, provides them with opportunities for learning

society including tours of facilities of travel and city life.

Dalian Mabuchi also provides scholarships to children who cannot enter schools of higher grade due to poverty even if they have excellent records at school and desires to learn. It has provided scholarships six times to 180 students in total between 1997 and 2003. It has already sent out graduates three times.

It is a contribution to society that a company trains its personnel through corporate activities. Similarly, Mabuchi Motor believes that to use money to spare to make the above-mentioned support to human resources development is also one of the contributions to society.



Students, who graduated from high schools with scholarship and passed entrance examinations to universities, and General Manager Okuma (Dalian Mabuchi)

In Taiwan, Mabuchi Motor promotes volunteer activities for local communities. Last year, for example, employees visited solitary old people, orphanages, and training institutes. Mabuchi Motor also makes donations to welfare work organizations around the world such as in Vietnam, New York, Taiwan, and China.

Individual overseas related companies positively participate in regional cleaning activities for the locations of their offices as part of environmental protection activities.



General Manager Haga and employees engaged in local cleaning activities (Jiangsu Mabuchi)

The whole Mabuchi Group is actively making contributions to society in various ways.



History of Mabuchi Motor Environment Conservation Activities

June 1993	Codified “business activities for developing, manufacturing, and selling small electric motors without sacrificing environment of the earth and the health of people” in Management Guidelines in “Management Philosophy”.
December 1993	Reported on development of the first cadmium-free materials for motor commutators
January 1994	Set targets of recycling rate and reduction of in-house waste as a year program and start continuous control of numeric targets.
June 1997	Set up “Environment Management Committee” for control of information regarding environmental problems in Business Platform Innovation Headquarters.
November 1997	Started improvement of cadmium free material.
January 1998	Revised the Standards for Waste Disposal Control to the Procedures based on 3R.
July 1998	Set up ISO 14001 certification acquisition project (called E-Project) in Business Platform Innovation Headquarters. Started prior survey to acquire ISO 14001 certification.
October 1998	Established Mabuchi Group “Basic Policy for Environment.” E-Project started its operations to acquire ISO 14001 certification.
May 1999	Established “Environment Policy” of Headquarters according to the requirements of ISO 14001.
May 1999	Announced “Interim Environmental Target” of Headquarters.
June 1999	Started operation of EMS (Environmental Management System) of Headquarters.
December 1999	Headquarters acquired ISO 14001 certification.
January 2000	Started to fully eliminate and reduce the use of trichloroethylene.
January 2000	Started activities to develop a new method of lead free soldering.
March 2000	Kaohsiung Mabuchi (Kaohsiung, Taiwan) acquired ISO 14001 certification.
May 2000	Completed full elimination of use of trichloroethylene in Headquarters.
July 2000	Malaysia Mabuchi (Malaysia, Ipoh City) acquired ISO 14001 certification.
August 2000	Jiangsu Mabuchi (Jiangsu, China) acquired ISO 14001 certification.
August 2000	Dalian Mabuchi (Liaoning, China) acquired ISO 14001 certification.
September 2000	Started development of hexavalent chromium free material for motors.





October 2000	Started green procurement activities.
December 2000	Completed evaluation of selection of cadmium-free substitutes.
December 2000	Taiwan Mabuchi (Hsinchu City, Taiwan) acquired ISO 14001 certification.
December 2000	Hong Kong Mabuchi (Hong Kong, Guangdong, China) acquired ISO 14001 certification.
December 2000	Started operation of returnable-container system in some regions.
March 2001	Vietnam Mabuchi (Bienhou City, Vietnam) acquired ISO 14001 certification.
July 2001	Lead-free soldering for motors was approved by Sony “Committee for Electrical Component Standardization.”
December 2001	Completed arrangement of mass-production of lead-free soldering.
December 2001	Posted “Environmental Report” 2001 edition on web site.
April 2002	Started sample shipping of hexavalent chromium free motors.
June 2002	Posted “Environmental Report” 2002 edition on web site.
July 2002	Detected soil pollution by tetrachloroethylene in a section on the premises of Headquarters and started its purification and improvement.
September 2002	Started supply of motors satisfying EU Directives of ELV and RoHS
December 2002	Renewed ISO 14001 certification of Headquarters by certification renewal audit.
May 2003	Kaohsiung Mabuchi acquired ISO 14001 recertification.
December 2003	Taiwan Mabuchi acquired ISO 14001 recertification.
July 2003	Malaysia Mabuchi acquired ISO 14001 recertification.
May 2003	Started construction work of Mabuchi Motor’s new Headquarters building to which state-of-the-art technology to reduce environmental load was introduced
August 2003	Dalian Mabuchi acquired ISO 14001 recertification.
September 2003	The 4th Environmental Managers Meeting was held.
October 2003	Started establishment of environmental accounting system with guidance from Shin Nihon & Co.
January 2004	Jiangsu Mabuchi acquired ISO 14001 recertification.
March 2004	Hong Kong Mabuchi acquired ISO 14001 recertification.
April 2004	Vietnam Mabuchi acquired ISO 14001 recertification.



MABUCHI MOTOR CO., LTD.

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