### Murata Group

# CSR Report 2006





### For Our Readers

The Murata Group began publishing its CSR Report in 2005, giving economic, environmental and social perspectives on the activities of Murata Manufacturing Group ("Murata") companies both inside and outside Japan. This 2006 CSR Report includes our basic policies, main efforts and achievements in fiscal 2005, and future plans.

By disclosing the above information, this Report aims to promote stakeholders' understanding of Murata's corporate social responsibility (CSR) regarding its business activities, so as to facilitate communication with our stakeholders.

### [Intended Audience]

This report is intended for Murata customers, shareholders, investors, employees, suppliers, governments, local residents and other various stakeholders.

### [Scope of this Report]

This report encompasses the activities of Murata Manufacturing Co., Ltd. and its subsidiaries and affiliates, both inside and outside Japan. However, the various environmental data are derived mainly from Murata Manufacturing Co., Ltd., and its manufacturing plants inside and outside Japan, as indicated by \* in "Major Plants and Subsidiaries" on page 6, unless otherwise noted.

### [Target period]

This document covers the Murata Group's activities and accomplishments for fiscal year 2005, spanning the period April 1, 2005 to March 31, 2006; however, some portions of this document address initiatives and plans beginning before 2005 or extending beyond 2006.

#### Reference Guidelines

Environmental Reporting Guidelines, 2003 Edition, of the Ministry of the Environment, Japan Sustainability Reporting Guidelines 2002 of the GRI (Global Reporting Initiative)

### For More Specific Data

This report includes only primary data. For more detail on respective subjects, refer to the "CSR Report 2006 Performance Data" addendum accompanying this Report.



Environmental data by business site and the initiatives unique to each site are available in the CSR Report by business site, as posted on the Murata website. For more detailed financial data, please refer to our Annual Report.

Published: August 2006 (Next CSR Report is slated for publication around July 2007.)



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### Top Message



# We Contribute to Society by Supplying Unique Products

Today, electronic devices play an indispensable role in society. The various electronic devices around us are always required to "be more compact, multifunctional, and sophisticated." The same holds true for electronic components incorporated in electronic devices. Our mission is to develop and provide various technologies that meet such needs, so as to bring greater convenience and amenity to people's lives. For example, we work to develop technologies that enable nano-level control of ceramic particles that are used as raw materials of electric components; module technologies to integrate several functions into an extremely small package; and communication technologies for exchanging large volumes of data at high speeds. We believe that another important mission for us is to devise and implement better measures for reducing any environmental impact on the part of our products and business activities, so as to realize harmonious coexistence with the global environment.

In advancing toward these ends, during fiscal 2005 we achieved several tangible outcomes. Concerning products, Murata was quick to complete measures so as to comply with the RoHS Directives, which went into effect in Europe in July 2006. The Company also voluntarily established stricter standards for chemical substances and their uses that are not covered by the RoHS Directives, and is advancing autonomous initiatives to meet the standards. As for business operations, now that Murata's Head Office has obtained ISO 14001 certification, we have established a group-wide management system based on the Plan-Do-Check-Action concept. We are also planning to convert our ISO certification into multi-site certification, to enable the efficient achievement of more fruitful results. Furthermore, through aggressive capital investments to introduce large-scale cogeneration systems in two domestic plants, and to implement other measures, we have achieved effective CO2 emissions reduction.

Yasutaka Murata

President

Statutory Representative Director Murata Manufacturing Co., Ltd.

# We Prosper Together with All Those Involved in Our Business

We cannot conduct our business activities without considering our relationships and communication with our stakeholders. This is consistent with the idea reflected in the Murata Philosophy, which states "to Allow Our Company, Our Employees, Customers and Other Partners, and Our Communities to Grow and Prosper." In other words, we need to ensure not only that our Company, but also all our stakeholders, will grow and prosper together.

We are continually talking with electronic equipment manufacturers - who are our customers about what functions will be necessary in the future, and what electronics components are necessary for realizing these functions. Through such discussions, we come to share the same themes as our customers from the early stage of development, and actively carry out technological exchanges. Meanwhile, Murata considers the shift from "green procurement" to "CSR procurement," which is beginning to be required nowadays, as a challenge to be addressed by the entire electronics industry. To accommodate this trend group-wide, we should always determine for ourselves whether or not our procurement-related initiatives are being appropriately carried out.

Improving employee satisfaction is our priority management task for the future. The improvement in employee satisfaction that Murata intends is closely related to the improvement in customer satisfaction. By responding to customer expectations, employees can also enhance their motivation, aspiration and enthusiasm, and thereby expand their own capabilities. Employee growth also enables the creation and provision of new values, leading to greater customer satisfaction. It then raises expectations for Murata, and further motivates employees to grow. To initiate such a virtuous cycle, we will vigorously work on human resource development, by implementing education and training programs tailored to various types of employees.

Murata has conducted business in various countries and regions, and is aware of the importance of communicating with residents in local communities, so as to obtain their understanding regarding our business activities. As part of such efforts, beginning in fiscal 2005 at Murata's Head Office we began to organize environmental education programs for elementary and junior high school children. The entire Murata Group will continue to actively provide similar learning opportunities for children, who will play a leading role in the future.

# Long-term Business Development is Possible Only for Trustworthy Enterprises

Introduced above are only a few examples of the Murata Group's activities to fulfill its social responsibilities. I am pleased that such activities are steadily achieving fruitful results. However, it is also true that many issues remain to be addressed. Enterprises today must meet social requirements that are steadily becoming greater and more complex. It is never easy to develop our business while meeting such expanding requirements. However, it is my belief that only enterprises that reliably fulfill their social responsibilities can win social recognition, and can continue and develop their business into the future.

I hope that many people read this CSR Report and understand the Murata Group's concepts and initiatives, and that those readers will give us their candid views.

Only enterprises that reliably fulfill their social responsibilities can win social recognition, and can continue and develop their business into the future.

### Regarding Murata Group

### Company Profile

Trade Name Murata Manufacturing Co., Ltd.

Date of Incorporation

December 23, 1950 (established October 1944)

Paid-in Capital ¥69,376 million (as of March 31, 2006)

Sales Amount Consolidated basis: ¥490,784 million Parent Co. basis: ¥422,578 million (as of March 2006)

Number of Employees Consolidated basis: 26,956 Parent Co. basis: 5,415 (as of March 31, 2006)

Stock Exchange Listings In Japan: Tokyo, Osaka Overseas: Singapore

### Location:

[Head Office]

10-1 Higashikotari 1-chome, Nagaokakyo City, Kyoto 617-8555, Japan

[Branch]

Tokyo Branch: Shibuya-ku, Tokyo

[Plants and Technical Center]

Yokaichi Plant: Higashiomi City, Shiga

Yasu Plant: Yasu City, Shiga

Yokohama Technical Center: Yokohama City, Kanagawa

Nagaoka Plant: Nagaokakyo City, Kyoto

Number of Subsidiaries

Consolidated basis: 56 (24 in Japan; 32 overseas)

(as of March 31, 2006)

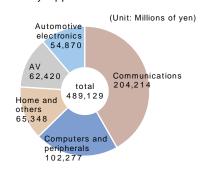
URI

http://www.murata.com/

### **Business Activities**

Everyday life is supported by a variety of electronic devices, such as personal computers, mobile phones and various home appliances. These devices have evolved rapidly and become increasingly smaller and more sophisticated, in the course of continuous progress. Their evolution is supported by Murata's diverse electronic components, which are incorporated in these devices and their circuit boards. Under the slogan "Innovator in Electronics," Murata helps realize a prosperous society by delivering innovative products and technologies for our electronics-oriented society.

#### Sales by Application



#### Mobile Communications

We have seen the rapid proliferation of mobile phones and global expansion of communications networks. Murata strives to stay on the cutting-edge of developments in communications technology.



### Computers

Computers have continued dramatically evolving, become ever faster and smaller with ever larger capacities and range of functions. This evolution has been made possible by electronic components. Murata's electronic components play an indispensable role as intrinsic elements in today's computers.



### Automotive Electronics

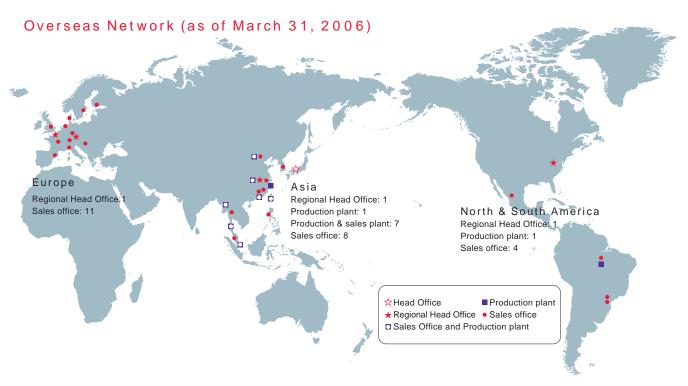
Murata's electronic components play an active role in automobiles. Automotive electronics precisely control every movement of your car; driving, curving, stopping, and more. Murata's high-performance components support the automotive electronics.



### Digital Home Electronics

Today we use a wide variety of electronic devices, such as televisions and digital cameras, as natural parts of our daily lives. Without us ever noticing, Murata's electronic components support the many functions of these devices, thereby enhancing our lives every day.





### Domestic and Overseas Subsidiaries

Domestic subsidiaries Fukui Murata Manufacturing Co., Ltd.\* Izumo Murata Manufacturing Co.,Ltd.\* Toyama Murata Manufacturing Co.,Ltd.\* Komatsu Murata Manufacturing Co.,Ltd.\* Kanazawa Murata Manufacturing Co.,Ltd.\* Okayama Murata Manufacturing Co.,Ltd.\* Kanazu Murata Manufacturing Co.,Ltd.\* Sabae Murata Manufacturing Co.,Ltd.\* Iwami Murata Manufacturing Co.,Ltd.\* Hakui Murata Manufacturing Co.,Ltd.\* Himi Murata Manufacturing Co., Ltd.\* Azumi Murata Manufacturing Co.,Ltd.\* Wakura Murata Manufacturing Co.,Ltd.\* Tome Murata Manufacturing Co.,Ltd.\* Anamizu Electronics Industries,Ltd.\* Asuwa Electronics Industries,Ltd.\* Ogaki Murata Manufacturing Co.,Ltd.\* Murata Land & Building Co.,Ltd. and six other companies

Overseas subsidiaries

North & South America Murata Electronics North America, Inc. (USA) Murata Electronics Trading México. S. A. de C. V (Mexico) Murata World Comercial Ltda. (Brazil) Murata Amazônia Indústria E Comércio Ltda.\* (Brazil) and one other company

#### Europe

Murata Europe Management B.V. (Netherlands)
Murata Electronics (Netherlands) B.V. (Netherlands)
Murata Elektronik GmbH (Germany)
Murata Electronics (UK) Limited
Murata Electronique SAS (France)
Murata Electronics Switzerland AG
Murata Elettronica S.p.A. (Italy)
and two other companies

### Asia

Murata (China) Investment Co., Ltd. (China) Beijing Murata Electronics Co., Ltd.\* (China) Murata Electronics Trading (Tianjin) Co., Ltd. (China) Wuxi Murata Electronics Co., Ltd. (China)\* Murata Electronics Trading (Shanghai) Co., Ltd. (China) Murata Electronics Trading (Shenzhen) Co., Ltd. (China) Shenzhen Murata Technology Co., Ltd (China) Murata Co., Ltd. (China) Hong Kong Murata Electronics Co., Ltd. (China) Korea Murata Electronics Co., Ltd. (Korea) Taiwan Murata Electronics Co., Ltd.\* (Taiwan) Murata Electronics Singapore (Pte.) Ltd.\* (Singapore) Murata Electronics Philippines Inc. (Philippines) Murata Electronics (Thailand), Ltd.\* (Thailand) Thai Murata Electronics Trading, Ltd. (Thailand) Murata Electronics (Malaysia) Sdn. Bhd.\* (Malaysia) Murata Trading (Malaysia) Sdn. Bhd. (Malaysia) and one other company

\*Plants/subsidies where environmental data are collected

























### Our Electronics Technologies Open Up the Future





In pursuit of new technological possibilities for the future, we progress day by day.

### Development of MURATA BOY

The evolution of electronic devices entails the evolution of electronic components: they must achieve ever-higher performance and ever-greater functionality. However, it is very difficult to keep the public aware regarding the appearance and performance of electronic components, since people generally have few opportunities to directly perceive such components. To convey to many people the roles of electronic components in an easy-to-understand manner, we have developed MURATA BOY, a bicycle-riding robot incorporating Murata electronic components.

The first version of MURATA BOY was created in 1990, 16 years ago. The first MURATA BOY was a simple robot. His bicycle handle was remotely radio-controlled, and he pedaled the bicycle without falling down by keeping his balance via a built-in controller. About a dozen years later, the Company decided to create the second version of MURATA BOY, and to unveil it at CEATEC JAPAN 2005, an international exhibition of Advanced technologies, held in October 2005.

### Our Technologies Continue to Evolve

Needless to say, the performance of sensors and other electronic components were much improved in comparison with the first MURATA BOY. However, the new challenge we faced was how to embody these improvements in the new version. We worked out a solution: free standing. In other words, have the bicycle-riding robot stop in place, feet on the pedals, without falling. Imagine trying to do that yourself on a stationary bicycle, and you will understand how difficult it was to realize this task.

The free-standing MURATA BOY was enabled by Murata's gyro sensors (angular velocity sensors) and technology for controlling them. While stationary, an object inevitably begins to lean either right or left. However, MURATA BOY features a gyro sensor that detects the slant angle to a precision of 0.1 degree; he can therefore maintain balance by rotating a large disk (flywheel) inside his chest. He is also equipped with another gyro sensor for detecting position. In combination with the rotary encoder installed on the front wheel, the gyro sensor can determine how far he has traveled in the horizontal direction (the direction of travel). With these sensors, MURATA BOY can precisely steer his bicycle along a path predetermined on a personal computer. Furthermore, he can easily run on a balance beam of nearly the same width as the tire of the bicycle he rides, by capturing images ahead of him with an eye camera.

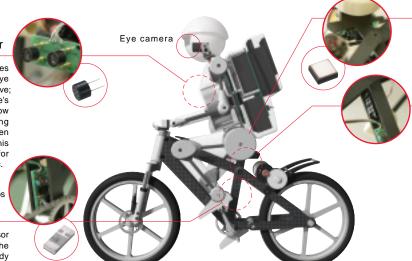
### MURATA BOY's components

Finds and avoids obstacles
Ultrasonic Sensor

He has a second set of eyes on his chest. The right eye emits a 40kHz ultrasonic wave; his left eye receives the wave's reflection. He measures how far an obstacle is by using the time difference between emission and reception. This technology is also used for automobile backup sonar etc.

Senses and rides over bumps Shock Sensor

MURATA BOY's shock sensor lets him know how bumpy the road is by detecting body vibration, so that he can stabilize himself at low speed. This technology is used to protect laptop computer HDD from damage.



Advances and stops without falling

Gyro Sensors(GYROSTAR\*)

Position detection Detects horizontal angular velocity; in other words, how far he has turned. By combining this information with the distance traveled, he can determine his current position.

Slant detection Detects left and right slant velocity. MURATA BOY uses this information to avoid falling by steering while in motion, or by rotating a flywheel inside his chest while stationary.

Official website of MURATA BOY http://murataboy.com/

# Sensors that Support Our Comfortable Lifestyles

The gyro sensor used in MURATA BOY to detect horizontal angular velocity has various applications. Familiar examples include compensation for digital camera shake and self-contained navigation of car navigation systems.

Among other technologies that MURATA BOY features is the ultrasonic sensor, which functions as his eyes, detecting whether or not there is an obstacle ahead, and measuring how far away it is by using the ultrasonic wave emission/reception time differential. This technology has been put to practical use as a parking assistant system incorporated into automobile bumpers. In addition, MURATA BOY employs a shock sensor to detect vibration and enable smooth running. This sensor lets him know how bumpy the road is by detecting body vibration, so that he can stabilize himself at low speed. This technology is used to detect vibration in laptop computers so as to protect the HDD.

As mentioned above, Murata's electronic components and modules are used in various types of electronic devices, and are constantly evolving as we do our part to realize a more prosperous society.



MURATA BOY Development Team members

## We always take the ambitious approach, transcending departmental boundaries

Despite the differences in jobs and departments, all those involved shared the same determination to complete MURATA BOY. In the course of development, we faced many difficulties. However, by steadily performing theoretical simulations we managed to complete MURATA BOY immediately before his unveiling at CEATEC. At the CEATEC venue, MURATA BOY attracted many visitors. We were especially delighted to see the excitement of so many children watching the bicycle-riding robot, wondering why he could remain still without falling over.

### Manufacturing Environmentally Conscious Products



We deliver more than 300,000 environmentally conscious products to our customers around the world.

# International Chemical Regulations becoming Stricter

In today's society, various chemical substances are used in diverse ways, and play indispensable roles in our daily lives. On the other hand, some chemical substances may adversely affect the human health and ecosystems. In regard to these hazardous chemical substances, there is a growing trend to regulate not only their use and emissions at factories, but also their use in electric and electronic devices sold on the market. This is exemplified by the Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (the "RoHS Directive")\*1, which went into effect in July 2006 in Europe. The RoHS Directive seeks to limit the amount of hazardous substances contained in new electrical and electronic equipment.

## Completion of Measures to Comply with the RoHS Directive

In 1996, Murata formulated the "Voluntary Regulation Program for Environmentally Hazardous Substances," to establish its voluntary regulation standards. Since then, Murata has worked to reduce and eventually eliminate environmentally hazardous substances contained in its products, ahead of other manufacturers. Our voluntary regulation program also covers six substances designated under the RoHS Directive. We have thus undertaken measures to phase out RoHS-designated substances from an early stage.

As for mercury, cadmium and specific brominebased flame retardants, Murata had already discontinued their use in its products in the 1990s, and has prohibited new uses of these substances. We also had to eliminate the use of lead in terminals and other component connections. Lead-free solder requires a higher melting temperature and less solderability than conventional solder containing lead. Due to these technological problems, lead-free solder is difficult to use. To address any problems, Murata has reviewed product designs, modified existing production facilities, improved processing conditions and introduced new machinery, in addition to various other measures. Through such efforts, by the end of 2004 we were able to prepare alternative for RoHS-designated substances. Moreover, in cooperation with our customers/ suppliers, in January 2006 we terminated, as a rule, the sale of products not in compliance with the RoHS Directive\*2.

# Further Reduction of Environmental Impact

Although Murata has completed its conversion to RoHS-compliant products, the Directive regulates only six substances, some applications of which are exempted from the Directive due to difficulty in finding alternative substances. Murata considers that compliance with the RoHS Directive is not a goal, but rather a transition point for us. We therefore set ambitious targets also for substances and applications that are not subject to the RoHS Directive, so as to systematically implement







Solder bath for lead-free wave soldering



RoHS-compliant products

(excepting exemptions and naturally occurring impurities). "RoHS compliant" designates a status of compliance with the above restrictions. \*2 Excluding when these products are supplied at the customer's request. \*3 General term for bromine-based flame retardants and chlorine-

based flame retardants

\*1 Refers to Restrictions on Use of Certain Hazardous Substances in Electrical and Electronic Equipment (2002/95/EC) and its amended version, implemented in Europe. The RoHS Directive prohibits the use of lead, mercury, cadmium, hexavalent chromium and specific bromine-based flame retardants (PBB, PBDE) in EEE

initiatives for reducing and minimizing environmental impact.

Taking lead as an example, its application is exempted from the RoHS Directive when used in certain ceramics employed for resonators and ceramic filters, and in glass used in some electrode and insulating materials. This is because no effective alternative substances and technologies are presently available. To address this lack, Murata is working to develop lead-free ceramic materials and electrical conducting/insulating materials, taking advantage of the Company's strength in materials development for electronic components.

Moreover, under the RoHS Directive, halogenated flame retardant\*3 regulations apply only to PBB/PBDE, which may generate dioxins during combustion. Other halogenated flame retardants used in printed circuit boards and plastics are also considered to pose risk of dioxin generation when burned. Murata is therefore active reducing its use of halogenated flame retardants and in replacing them with alternative substances.

In addition to the above activities, we are planning to reduce and eventually eliminate the use of inorganic compounds and polyvinyl chlorides (PVCs). Under existing legislation, their use is not restricted, though their management is required. However, in line with our voluntary standards, we will gradually reduce and eliminate these substances, beginning with those having relatively high environmental impact.

### <u>Voice</u>



Members of Subcommittee for Regulated Substances Management

### We are quick to comply with regulations and directives in advance of their enforcement

In 2006, the RoHS Directive came into effect in Europe. In the future, other regulations and directives, including REACH in Europe, are planned to implementation. To comply with these new regulations and directives, we are gathering relevant information in the development stage, so that Murata's in-house regulations will cover new legislation in advance of its enforcement.

Whenever these regulations and directives are newly instituted or amended, we must swiftly check the specified substances contained in our products and, if necessary, begin developing or procuring alternative substances. To this end, we have compiled a database on substances used in Murata products and their contents, and materials purchased, enabling timely and appropriate response.

### Measures to Prevent Global Warming



In doing our part to prevent global warming, we actively implement measures that include the introduction of effective cogeneration systems.

### Challenge of energy consumption increase with use of clean rooms

In recent years, electronic devices such as personal computers, mobile phones and various home appliances, have become increasingly compact and multifunctional, necessitating the downsizing of their circuit components. Because such downsizing requires processing accuracy to the micron level, the slightest changes in temperature or humidity can result in uneven quality, while the intrusion of dust may result in component failure. To prevent such problems we use clean rooms, where temperature and humidity are kept constant. Accordingly, the ratio of production in clean rooms is on the rise.

In clean rooms, air is circulated via highperformance filters to remove dust from the production process and from outside sources. Moreover, maintaining constant temperature and humidity entails additional energy consumption for dehumidification and humidification, in addition to air conditioning. For these reasons, the energy consumed by a clean room air conditioning system is about two to four times that consumed by conventional air conditioning systems. This was a major factor in the energy consumption increase seen during our production activities.

### Introduction of large-scale cogeneration systems

Thus far, Murata has taken such steps as waste heat recovery, and replacing freezers with higherefficiency models, so as to curb the increase in energy consumption for air conditioning. However, we have not yet reached our self-imposed targets for helping alleviate global warming.

To achieve these targets, we introduced largescale cogeneration systems into Murata's Yokaichi Plant and the Miyazaki Plant of Fukui Murata Manufacturing Co., Ltd. These Plants consumed greater amounts of energy than other plants of the Murata Group in Japan. The systems introduced comprise lean-burn gas engine power generators fueled by natural gas. Using exhaust heat, these systems heat and cool water for air conditioning. Introduction of these cogeneration systems enabled us to cut air-conditioning energy consumption at these plants by about half.

These cogeneration systems, recognized as excelling in energy-saving effect, are subsidized by the New Energy and Industrial Technology Development Organization (NEDO), under its Energy Use Rationalization Business Support Project.







Gas engine in the cogeneration system



Clean room

### Substantial effects of cogeneration system introduction

As a result of our introducing the gas engine cogeneration systems in fiscal 2005, the Yokaichi Plant and the Miyazaki Plant of Fukui Murata Manufacturing are each expected to achieve nearly 20% reduction in CO2 emissions. Taken together, the CO2 reduction effects of these two plants are estimated to comprise 3% of CO2 emissions for the entire Murata Group.

In future we plan to introduce the cogeneration systems to other plants, and develop additional measures for helping prevent global warming to the maximum extent.



Members in charge of facility operation management

### We are uncompromising in our total commitment to energy conservation.

We have already taken almost all energy-saving measures in our manufacturing sites in Japan. It was therefore said that reducing CO2 emissions by 1% is like trying to wring out a dry rag. Under such difficult conditions, our two plants, if combined, achieved about 4% reduction in the entire Murata Group. We are pleased with such outstanding results.

We will continue working to contribute to global warming prevention by implementing further energy-saving measures, including a three-year project to replace approximately 30,000 lighting fixtures with high-efficiency HF lighting systems.

### Corporate Governance

Corporate governance is one of the highest priorities of our management. We have addressed this priority by ensuring speedy decision-making, improving management efficiency, and strengthening management-monitoring functions.

### Corporate Governance System

Murata Manufacturing has adopted a statutory auditor system that comprises 9 directors (2 from outside the Company) and 5 statutory auditors (3 from outside the Company).

#### **Board of Directors**

Murata Manufacturing has separated its day-to-day business operations from its management policy and decision-making tasks for critical business operations. Moreover, under its current system of vice presidents, the Company is further strengthening its management functions. The board of directors comprises 9 executives, 2 of whom are from outside the Company. The board focuses on management policies, decision-making and supervision of critical business operations, while monitoring the performance of the statutory representative directors. Moreover, the Management Executive Committee was established as a deliberative body to assist the board of directors and president in their decision-making.

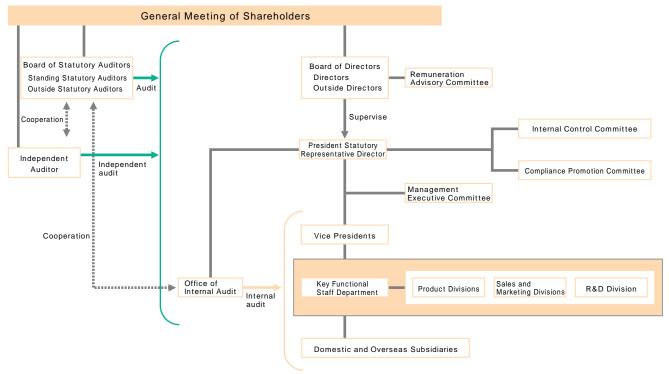
### Audit System

The Company has 5 statutory auditors, 3 of whom are external statutory auditors. In addition to attending the Board of Directors' meetings and other important meetings, statutory auditors also inspect whether the board of directors performs its tasks properly, and conducts detailed audits of legality and validity, which includes inspections of the operations and financial statements of Murata. Moreover, the Functional Staff Division regularly advises and monitors the day-to-day operations of the entire Murata Group. Meanwhile, the Office of Internal Audits, directly under the President, exercises control through audits over respective divisions, including the Functional Staff Division.

#### Internal Control Committee

Murata has established the Internal Control Committee to ensure the effectiveness of Murata's internal control, and provide comprehensive supervision and administration of internal control. This organization further strengthens the internal control system of the entire Murata Group, with the committee conducting internal controls in cooperation with relevant divisions and departments.

### Corporate Governance System



### Compliance

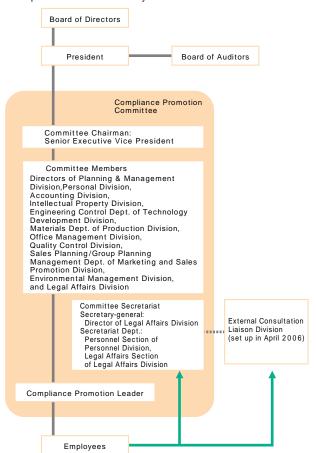
For a corporation to survive and develop, it must operate in compliance with laws and regulations, and act ethically. Murata ensures fair business activities by establishing the Compliance Promotion Committee and by introducing a reporting system.

### Compliance Promotion Committee

To promote compliance, it is important that management take the lead in implementing compliance initiatives. The Murata Group established the Compliance Promotion Committee as an advisory body directly reporting to the president. This committee consists of at least 8 corporate officers and senior employees. The committee develops group-wide compliance policies and revises compliance programs.

A Compliance Promotion Leader is selected from each division. Compliance Promotion Leaders take corresponding courses as well as group training and other training programs that are tailored for them. They impart the knowledge they have acquired through these training programs to other members in their divisions, via study meetings and other means.

Compliance Promotion System



### Corporate Ethics Policy and Code of Conduct

The Corporate Ethics Policy and Code of Conduct have been established to ensure that both corporate officers and employees implement Murata's corporate philosophy and act on common sense as corporate citizens. These policies and codes are distributed to all employees and used as reference materials in their training and study sessions

### Murata Corporate Ethics Policy

To act in good faith under the spirit of the Company's corporate philosophy.

To comply not only with laws and regulations, but also with social rules, and to conduct corporate activities with the highest ethical standards.

To attach importance to improving the transparency of corporate activities and to actively disclose information.

To give due consideration to the gl environments, and to win the trust of society. give due

To conduct business systematically and rationally, and to display collective strength through teamwork.

To entertain feelings of gratitude as a good corporate citizen, and thereby contribute to realizing a prosperous society.

To establish clear objectives by ourselves, and to work hard together to achieve these objectives. toward self fulfillment.

### Reporting System

Murata has established a direct reporting system to facilitate compliance-related problem solving. If employees have a compliance-related question or problem, particularly when it is not appropriate or comfortable to consult their immediate supervisors, they can use this system to directly consult by email or telephone with the Compliance Promotion Committee or the Consultation Liaison Division outside the Company. Anonymous reports may also be accepted.

If receiving a report regarding a behavior that deviates from the codes of conduct, the secretariat will investigate all the facts. It will then respond to the questions from the employees in an appropriate manner, in cooperation with the relevant divisions and external experts (corporate attorneys). If a radical solution at the companywide level is required, the problem is discussed by the Compliance Promotion Committee to work out a solution and measures to prevent the problem from recurring, with a requirement that the results be reported back to the employee who first consulted on the matter.

### Risk Management

Business operations carry a variety of risks. To promptly address these risks, Murata has established a system that enables us to best predict risks and take flexible risk management measures.

### Risk Related to Market and **Demand Fluctuations**

In the electronics products market, demands fluctuate widely, and Murata's business performance is greatly affected by these fluctuations. Based on medium- and long-term forecasts of the market, Murata copes with sharp demand fluctuations by devising and implementing various measures. For instance, we swiftly arrange the required personnel and production equipment to enhance production capacities according to the growth in demand, and adjust the number of operating days according to fluctuations in demand.

### Information Risk

We believe that the protection of any information by which an individual can be identified ("personal data") is a significant duty that all corporations must fulfill. Murata established its Privacy Policy, and has stipulated the handling of personal data in its Privacy Policy Basic Rules. In response to the law in Japan protecting personal information that went into effect in April 2005, Murata continues trying hard to keep every employee informed about the handling of personal data, and to strengthen the personal data management system.

#### Items covered in the Privacy Policy

- 1. Proper use of personal data
- 2. Non-disclosure of personal data to third-parties
- 3. Inquiries of personal data
- 4. Secure management of personal data
- 5. Education and instruction to Directors and employees
- 6. Compliance with laws and other regulations regarding personal data
- 7. Continual improvement of our practices for protecting personal data

### Natural Disaster Risks

### Disaster Prevention System

To prepare for large-scale earthquakes, Murata has dispersed its production plants of important products to various areas in Japan and overseas. We have also improved the earthquake-resistance and earthquake-proof safety of our buildings and production facilities, installed disaster-prevention materials and equipment, secured backup power sources, and taken various other measures. Murata has also set up a Disaster Prevention Committee and formed self-protection fire-fighting teams and other units. Other disaster prevention initiatives that are being carried out include designing countermeasures against disasters such as fire accidents, promoting daily activities concerning fire control and disaster prevention, and implementing fire-fighting exercises and emergency evacuation drills.

### **Emergency Drills**

Each year, emergency drills are regularly conducted to prepare for the occurrence of earthquake or fire, so that employees can take appropriate actions in the event of disaster. For manufacturing processes that could be greatly affected by a disaster, in addition to ordinary drills, special emergency drills are carried out in accordance with the emergency response manual. The self-protection fire-fighting teams play a pivotal role in these drills, conducting training on a regular basis as part of emergency preparedness. They also participate in the fire-fighting competitions that are held in each region, to demonstrate the results of their daily efforts.





Fire-fighting competition

### Environmental Risk

Concerning environmental accidents, Murata continues to work diligently on risk forecasting and prevention, facility preparation, and emergency measures.

[For details, see pages 31 and 32.]

### Relations with Stakeholders

As a member of society, a corporation cannot operate their business activities without obtaining trust from society.

Recognizing the extreme importance of communication with our stakeholders, Murata works to build better partnerships with its stakeholders.

### Growing as a Reliable Company

Murata conducts its business activities keeping in mind its relationships with its various stakeholders. Murata's wide variety of stakeholders include customers, shareholders, investors, employees, suppliers, governments and local residents. Murata believes that a corporation should not only pursue profits, but also have a great influence on society. If it fails to gain society's trust, it will not be able to operate its business activities effectively and productively. To enjoy the confidence of society, it is necessary for us to sincerely listen to our stakeholders, and meet their requests. Repeated communication with our stakeholders enables us to consider the roles we should play, the challenges we should address, and the goals we should set and achieve, among other things. Through such communication, we aim to become a more reliable company.

We provide high quality products and excellent services that can satisfy our customers. We also aim for appropriate disclosure of information, including about product safety.

With the aim of creating a workplace that is comfortable and easy to work in, we will quarantee equal employment opportunities as well as occupational health and safety, and promote human resource development based on respect for each individual employee.

We intend to establish mutually trusting relationships with our suppliers so that our business connection with them is one of co-prosperity. Moreover, Murata will adhere to ethics, laws and regulations in order to perform our business transactions fairly.



While valuing communication with society and our local communities, we will contribute toward building better communities through local community activities and academic support activities.

As basic policies, we aim to improve our corporate value and pay stable dividends. We will also disclose information in a proper and timely manner.

While fulfilling our responsibility of paying taxes to the national and local governments, we will carry out business activities in compliance with all applicable laws and regulations.

### Global Environment

The Earth provides us with both resources and energy that serves as the basis for all our business activities. We will strive to make effective use of these precious resources and give priority to business operations that place fewer burdens on the global environments.

### Economic Relations with Stakeholders

When we develop, produce and sell our electronic components and modules, economic relationships arise between Murata and various stakeholders. The economic relationships between Murata and its various stakeholders are described below.

### Murata's Concept regarding its Economic Value Distribution

We believe that it is important to distribute the values generated through our business operations to our various stakeholders, and to appropriately return our profits to them. When Murata operates its business activities, it has direct or indirect economic influences on various stakeholders. However, at this point it is very difficult to identify all these influences. This section therefore mainly discloses our direct influences.

### **Economic Relations** with Stakeholders

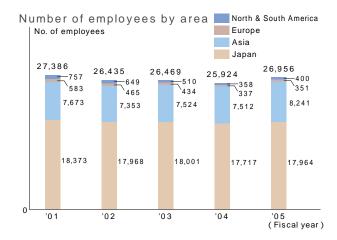
#### Customers

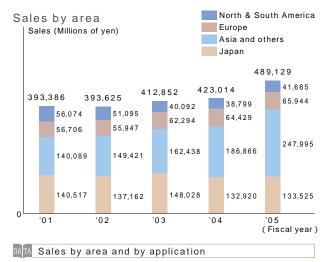
As an electronic component manufacturer, Murata earns its profits mainly by selling its electronic t o electronic components equipment manufacturers, who are our customers. Murata's net sales for fiscal 2005 totaled ¥490,784 million. Of this amount, sales of electronic components and related products was ¥489,129 million. By area, domestic sales accounts for 27.3% and overseas sales accounts for 72.7%, indicating that Murata's products are widely used in the world's electronic equipment markets.

#### **Employees**

Murata carries out global business activities, deploying its production plants and sales offices in 24 locations in Japan and 32 locations overseas (as of March 31, 2006). Murata's motto is to produce products wherever there is sufficient demand, and to provide good products and services equally to customers around the world. In line with this motto, we have deployed appropriate personnel worldwide.

In fiscal 2005 there were 26,956 Murata employees (17,964 in Japan and 8,992 overseas). If we include family members, this number reaches a truly significant figure. Murata's business activities thus support the livelihoods of many people.

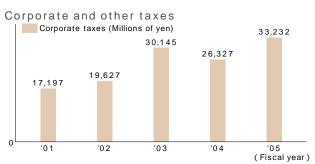




### Governments

Corporate and other taxes for fiscal 2005 totaled ¥33.232 million.

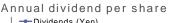
\* Calculated from "Corporate and other taxes" in the statement of income.

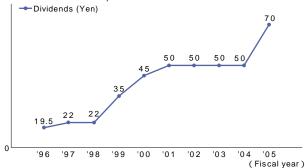


#### Shareholders

Murata's basic policy of profit distribution to shareholders is to prioritize the sharing of gains through dividend distribution, and to steadily raise dividends by increasing profit per share, while enhancing Murata's corporate values and strengthening its corporate structure. On the basis of this policy, we reward our shareholders by paying dividends, after comprehensively considering our business performance and dividend payout ratio on a consolidated basis, as well as the accumulation of internal reserves necessary for reinvestment to ensure future development. Murata has striven to raise its dividend payments. In fiscal 2005, in light of business performance and the accumulation of internal reserves, Murata paid a dividend of ¥70 per share, up \u20 from the previous year. Regarding dividends for fiscal 2006 as well, we are planning to pay ¥80 per share, an increase of ¥10 from fiscal 2005. As well, the Company acquires treasury stock, as deemed appropriate, so as to improve capital efficiency while responding to changes in the business environment.

In fiscal 2005, of Murata Manufacturing's shareholders, approximately 37.8% were overseas shareholders. We actively carry out investor relations activities. As part of such efforts, we hold Company information sessions for shareholders and investors on a regular basis, in New York, London and other major cities worldwide.





### Local Communities

To distribute Murata's economic value to local communities, we conduct activities to contribute to local communities, through participation in corporate citizen programs, donations to local organizations and other means. Murata's initiatives to contribute to local communities include offering support and financial aid for basic research projects via the Murata Science Foundation, environmental improvement of community welfare facilities, and sponsoring local sports events. In fiscal 2005, Murata Group companies in Japan made donations worth ¥255 million. From all its domestic and foreign companies, Murata donated ¥762 million to victims of Hurricane Katrina, which afflicted the U.S.

#### DA TA Support for disaster victims

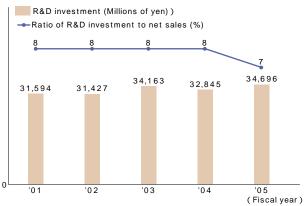
### R&D and Capital Investments

As described above, the economic values Murata continues to generate are distributed to its various stakeholders, and used as R&D and capital investments.

In line with the basic principle, "new quality electronic equipment begins with new quality components, and new quality components begin with new quality materials," Murata has established a total manufacturing system encompassing materials, production methods, design and production. By developing new technologies and products and then introducing them to the market, Murata obtains new economic values. Murata has always invested about 7 to 8% of its net sales on a consolidated basis. In fiscal 2005, we invested 34,696 million yen in R&D activities.







Furthermore, in view of demand fluctuations and decline in product prices in the electronic equipment markets, Murata has carried out capital investments based on medium- and long-term forecasts of the market. In fiscal 2005, capital investment totaled ¥51,040 million, and depreciation and amortization totaled ¥45,139 million.

Henceforth, we will continue capital investments to promote R&D for producing new materials, technologies and products, and to ensure stable supply based on market needs.



### Murata Environmental Charter

In 1995, Murata established its Environmental Charter, which spells out the basic environmental policy and action plan for the whole group. Murata is making a daily effort to put this commitment into practice.

### Murata Group Environmental Policy

### [Concept]

In the desire to contribute toward the realization of a truly rich human society, we develop superior materials and products, devise and maintain production activities, and supply products worldwide. However, we cannot deny that our production activities as well as our products themselves are unintentionally affecting the global environment. We fully acknowledge this impact on the global environment and are taking actions to reduce our environmental impacts as one of the important initiatives being put into practice as part of our Murata Philosophy and establishment vision. We will unite the efforts of our management organization, repeatedly work toward reducing our environmental impacts, and through management efficiency determine the points at which business and environmental interests converge.

### 【Corporate Environmental Policy】

- 1. We do not confine ourselves to the mere observance of environmental laws and regulations; rather, we seek to establish voluntary management standards and to improve our management standards regarding environmental protection.
- 2. We will strive to reduce the environmental impacts of our products.
  - 2-1 In our R&D and design activities, we will consider approaches that will minimize the environmental impact of our products.
  - 2-2 In cases where a product contains an environmentally hazardous substance, we will seek ways to reduce the amount used or incorporate a more benign substitute.
  - 2-3 In an effort to minimize the amount of packaging materials used with our products, we will adopt a "reduce, reuse and recycle "policy.
  - 2-4 We will develop procurement activities through which we will select materials that have minimal direct or indirect environmental impacts.
- 3. We will strive to reduce the environmental impacts of our business operations.
  - 3-1 To help prevent global warming, we will implement energy conservation and reduce greenhouse gas emissions.
  - 3-2 Where production processes make use of environmentally hazardous substances, we will seek ways to reduce the amounts used or incorporate more benign substitutes.
  - 3-3 We will aggressively seek to reduce, reuse and recycle wastes, and seek to minimize the amount of waste produced and conserve resources.
- 4. Through aggressive social initiatives, we will adopt environmental preservation activities in close contact with the local community and promote afforestation of corporate land according to a systematic long-term plan while working to improve the local environment.
- 5. While making all employees aware of the environmental policy, we will strive to raise employee awareness of higher environmental ethics. Moreover, we will develop timely and appropriate educational as well as public relations activities.
- 6. We will strive to become a corporation focused on environmental management and active public disclosure of our achievements in this area.
- 7. To implement each of the above action guidelines, we will establish and adopt our environmental action plan while continuously striving to improve our environmental performance.

### Targets and Results for Fiscal 2005

Theme	Item	Targets for Fiscal 2005	Results from Fiscal 2005	Achievement
Environmental management	Enhancing environmental management system	Obtain ISO 14001 certification for Murata Head Office and Tokyo Branch (including sales divisions)	Murata Head Office and Tokyo Branch (including sales divisions) obtained ISO 14001 certification.	
		Determine method of allowing overseas subsidiaries to introduce environmental cost management systems.	Method established; overseas subsidiaries scheduled to introduce environmental cost management system in latter half of fiscal 2006.	
Supplying environmentally conscious products	Environmentally conscious designs	Compile ECO-R database.	Database completed in October 2005.	
		Survey life cycle assessment (LCA) data in major plants in Japan.	Surveys conducted in major plants in Japan to collect LCA data.	
	Reducing use of environmentally hazardous substances contained in products	Complete replacement of RoHS non-compliant products with RoHS-compliant ones, and terminate sales of non-compliant products.  Identify actual use conditions of halogenated flame retardants, and develop plan for their reduction.	RoHS non-compliant product replacement was completed and sales of non-compliant products were terminated. (Excluding when these products are supplied at the customer's request.)  Based on actual conditions identified, plan was drawn up for reducing use of halogenated flame retardants.	
	Managing information related to environmentally hazardous substances	Compile database for ASC/module products.	Discussions were held regarding the database; based on the outcome, the database was created and is to become operational within fiscal 2006.	
	Reducing use of packaging materials and conserving energy consumed in distribution	Reduce amount of packaging materials used per unit of net production in Japan by more than 17% compared to FY 2000 levels.	20% reduction achieved per unit of net production compared to FY 2000 levels.	
		Reduce CO <sub>2</sub> emissions from physical distribution per unit of net production in Japan by more than 7% compared to FY 2000 levels.	18% reduction achieved per unit of net production compared to FY 2000 levels.	
	Green procurement	Prepare material green value study documents and relevant procedure manuals (for two overseas sites), taking into account local legislation and technological standards.	Green procurement procedure manuals drawn up at two overseas sites.	
		Introduce green procurement system to domestic sites, so as to achieve 80% or higher green procurement ratio for office supplies.	Green procurement ratio at domestic sites reached approximately 91%.	
Eco-friendly business operations	Global warming prevention	Reduce $CO_2$ emissions per unit of net production in Japan by more than 22.8% compared to FY 1990 levels.	30% reduction achieved per unit of net production compared to FY 1990 levels.	
	Resource conservation and waste reduction, reuse and recycling	Reduce total waste emissions per unit of net production in Japan by more than 20% compared to FY 2000 levels.	26% reduction achieved per unit of net production compared to FY 2000 levels.	
		Increase our material recycling rate in Japan to more than 85%.	Material recycling rate of 99% achieved.	
		Reduce water consumption per unit of net production in Japan by more than 10% compared to FY 2000 levels.	23% reduction achieved per unit of net production compared to FY 2000 levels.	
	Managing and reducing environmentally hazardous substances used in production processes	Reduce atmospheric emissions in Japan of PFCs (which contribute to greenhouse gases) by more than 30% compared to FY 2002 levels.	18% reduction achieved in atmospheric emissions of PFCs in Japan, compared to FY 2002 levels. By implementing countermeasures currently in design, we expect to achieve 71% reduction in fiscal 2006, as compared to FY 2002 levels.	×
		Reduce atmospheric emissions of VOCs (which contribute to generation of photochemical oxidants) and suspended particulates by more than 1% compared to FY 2000 levels.	We implemented measures, though as yet without much effect because we took time to discuss their feasibility. In FY 2006, these measures are expected to begin exerting their effects, and to achieve 22% reduction from FY 2000 levels.	×
	Risk management	Discuss and implement measures to accelerate remediation at five locations.	Measures implemented as scheduled.	
Social activities	Environmental communication	Continue to issue annual CSR report and release additional information more than two times per year via other media.	CSR Report 2005 published. At Murata website, section "Corporate Social Responsibility" was redesigned.	
		Establish procedures to create environmental reports on each site.	Procedures established for creating environ- mental reports on each site.	
	Community/ social activities	Implement environmental education programs for elementary and junior high school children at Head Office.	Environmental education programs implemented at four elementary schools and two junior high schools.	
		Complete foundation work for biotope creation at Nagaoka Plant.	Foundation work not yet completed, since we took time to discuss and determine construction plan. Work is scheduled for completion in December.	×

TA 3rd Environmental Action Plan

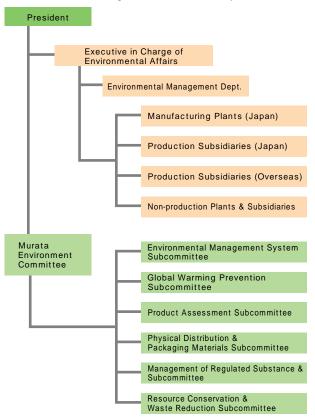
### **Environmental Management**

For efficient environmental stewardship, it is important to establish both a proper environmental management system and a system for promoting environmental management. On the basis of its environmental management promotion system, Murata will further increase the number of its plants and offices with ISO 14001 certification, make effective use of environmental accounting, and promote environmental education.

### **Environmental Management** Promotion System

To promote group-wide environmental management, Murata has appointed an executive in charge of environmental affairs, as the person responsible for harmonizing the environmental activities of the entire group. Environmental Management Department staff serve to propel the environmental activities of Murata Group companies in Japan and abroad. As a consultative body to the President, we have established the Murata Environment Committee, to examine and deliberate group-wide environmental initiatives and themes. Furthermore. as subordinate organizations of the Environment Committee, we have set up subcommittees on specific themes. Each of these subcommittees identifies theme-related problems and develops concrete measures to address those problems.

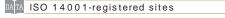
### **Environmental Management Promotion System**



### Acquisition of ISO 14001 Certification

All Murata's production sites in Japan and other countries have acquired ISO 14001 certification. In fiscal 2005, the Head Office, Tokyo Branch and domestic sales offices of Murata Manufacturing Co., Ltd. obtained ISO 14001 certification. Consequently, we have completed establishment of environmental management system in Japan.

For fiscal 2006, we plan to link together the environmental management systems of plants, offices and subsidiaries, so as to convert all the individual certifications into a single multi-site ISO 14001 certification.



### **Environmental Audits**

Environmental audits are carried out on a regular basis to make sure environmental management is being properly implemented. We have employed both internal and external audits at each of our production plants and production subsidiaries to ensure balanced, effective environmental manage-

### Internal Audits

### Plant Internal Self-audit

We have established a management standard for day-to-day business at each production plant and subsidiary. Based on this standard, operations are monitored so that we can discover and correct noncompliance immediately. In addition, we conduct annual internal audits to check whether the various prescribed rules are being followed correctly.

### Functional Staff Audit by the Environmental Management Dept.

This audit is conducted on a regular basis in order to complement inspections by the external certification body, and compensate for specialized areas that cannot be covered by the plant's own internal inspection.

### Audit by Auditors

Auditors study and inspect whether the Company's environmental management system has been established and implemented appropriately, and whether management is being conducted in an overall consistent manner. If necessary, the auditors will make comments.

### **Environmental Education**

To sustain environmentally conscious business operations, it is vital to enhance the environmental awareness of each and every employee. Toward this end, employees should understand the environmental vision and policies set forth by corporate management and the initiatives implemented by the respective divisions. Murata therefore provides its employees with various opportunities to acquire environmental education.

Specifically, we organize level-based environmental education programs, respectively tailored to newly hired employees, rank-and-file employees and management-level employees. In addition, we offer training courses to develop qualified personnel as internal environmental auditors, and individualized education programs for employees engaged in tasks that may have high environmental impact.

Environmental Education and Training, and Persons with Environmental Qualifications



Seminar for training internal environmental auditors (Fukui Murata Manufacturing Co., Ltd.)

### Environmental Awareness Raising

In Journal Murata, our company newsletter, we present an annual feature on our environmental activities, in order to enhance environmental awareness among our employees. Through this annual feature, we report on the progress the Company has made in implementing themes for company-wide initiatives, and introduce examples of environmental measures we take.

Also, we have expanded our company award system with our Global Environmental Protection Promotion Award, an achievement award that recognizes employees who have made a significant contribution to environmental preservation.

#### Global Environmental Protection Promotion Award

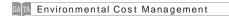
Fiscal year	Subject awarded		
2003	Development of electrolyte tin plating bath for lead- free soldering		
2004	Achievement of zero emissions at plants and subsidiaries in Japan		
2005	Waste fluid reduction at Yasu Plant		

### Environmental Cost Management

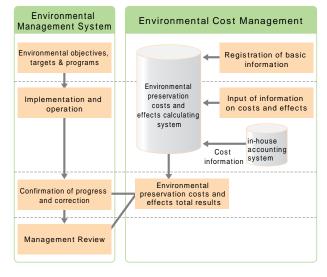
In the interest of ensuring more efficient environmental management, Murata identifies and analyzes the effects of its environmental preservation costs and results. To underpin this approach, in 2003 Murata established a unique environmental cost management system and introduced it into in our offices, plants and subsidiaries in Japan.

This system has enabled Murata to pinpoint the costs and effects of individual programs of its ISO 14001-compliant environmental management system. The obtained information enables us to continually confirm our progress, modify our plans or review our management approach. We make use of this system to implement efficient measures, promote horizontal business development, and establish and review our environmental objectives and targets in view of greater efficiency.

In fiscal 2006, Murata commenced preparations for introducing environmental cost management systems at overseas subsidiaries. The system will become operational in fiscal 2007.



#### **Environmental Cost Management System**



### Overview of Environmental Impacts

Murata's business operations have various forms of environmental impact. To reduce environmental impact arising from our business activities, we work to identify any such impact throughout the product lifecycle.

### Overview of Our Environmental Input

Our environmental input consists largely of the raw materials for producing our products and the energy used in our production activities. Murata is undertaking various group-wide measures to reduce energy consumption, including active introduction of large-scale cogeneration systems for effective energy use. Our business activities characteristically entail use of large amounts of chemical substances. Murata has implemented stringent and proper management of chemical substances, so as to reduce the amounts of their use.

### Overview of Our Environmental Output

Our environmental output includes CO2 emissions into the atmosphere, generation of waste, and effluent discharge into rivers and seas. Now that Murata has already achieved zero emissions (defined as a 100% recycling rate and zero landfilling of targeted waste matter) at plants and subsidiaries in Japan, we are working to reduce waste generation itself and improve our recycling standards.

Even after delivery to our customers, Murata can often help those customers save resources and energy when assembling our products into their own. Therefore, in future we will obtain and analyze data on the environmental impact of our products in use.

### INPUT

### 【Calculation method】

- ·Chemical substances Amount of PRTR\*-listed substances handled at plants and subsidiaries in Japan
- •Energy
  Energy and fuel consumed in plants and subsidiaries in Japan and overseas
- Water Water consumed in plants and subsidiaries in Japan and
- \*PRTR: Japanese Pollutant Release and Transfer Register

### Suppliers

We carry out our own surveys and evaluate the environmental soundness ("greenness") of our suppliers, and thereby determine those suppliers from whom Murata prefers to procure goods.

### **OUTPUT**

#### [Calculation method]

·Chemical substances

Calculated by multiplying the amount of PRTR-listed substances handled at plants and subsidiaries in Japan by the percentage of substances emitted to the atmosphere and waters.

Atmospheric emissions

CO<sub>2</sub>: Calculated by multiplying the consumptions of energy and fuel used in plants and subsidiaries in Japan and overseas by the CO<sub>2</sub> conversion factor.

NOx, SOx: Calculated based on measurement results of

substance concentrations in emissions from exhaust points of plants and subsidiaries in Japan and overseas.

- ·Wastes (limited to wastes requiring disposal costs) Amount of wastes produced at plants and subsidiaries in Japan and overseas
- Wastewater

Amount of wastewater discharged to sewage or rivers from plants and subsidiaries in Japan and overseas

### Chemical substances

### 5,662 t

### Energy

275,812 kℓ (Crude oil equivalent)

•Electricity 867,350,000 kWh •Fuel 55,839 kℓ

### Water

8,630,000 m<sup>3</sup>



### Murata Manufacturing Group

We strive to identify the environmental impacts of our products from the development and design stages, and to minimize the impacts in regard to product development.



### Customers

We advance product development with the aim of offering better products that can help our customers minimize environmental impact, even after the products have been delivered. Going forward, we will strive to obtain and analyze data on the environmental impact of our products in use.



### Chemical substances

34.5 t

### Atmospheric emissions

•CO2 479,514 t-CO<sub>2</sub> 142.4 t ·NOx ·SOx 19.6 t

### Wastes

31,118 t

### Wastewater

7,820,000 m<sup>3</sup>

\*Murata does not emit greenhouse gases other than CO<sub>2</sub>. (Greenhouse gases are referred to as those stipulated in the Law Concerning the Promotion of Measures to Cope with Global Warming.)

### Development and Design

We are aware that due to the nature of our business, some of our products have considerable environmental impact.

In light of this, we conduct product assessments and LCA data analyses from the product development and design stages, to promote the development of products with low environmental impact.

### Developing and Designing Environmentally Conscious Products

Murata has recognized that its priority task is to minimize the environmental impact of its products, in view of the characteristics of Murata's business operations. Based on such recognition, Murata has been actively implementing measures such as reducing the use of environmentally hazardous substances contained in its products, designing more compact products, and saving power.

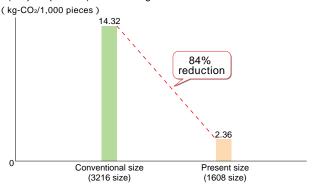
Specifically, in 1995 Murata established its LCA Subcommittee, and in 1999 introduced life cycle assessment (LCA) into its R&D process. Moreover, since November 2004 we have adopted and implemented in earnest the product assessment system in every division.

### Employment of LCA in Product Development and Design

The life cycle assessment (LCA) is a method of quantitatively assessing the various environmental impacts imparted by a product throughout its life cycle, which extends from resource extraction to manufacturing, sales, use, and disposal.

Using analyses results of LCA data on our typical products, Murata prepared its own LCA guidelines and introduced them into the R&D process. The items considered in an LCA assessment include carbon dioxide emissions, lead content, and the amount of principal raw materials consumed. The LCA assessment thus covers not only the product itself but also the equipment used to produce the product.

#### CO2 emission reductions resulting from product (chip capacitor) downsizing



Introduction of Product Assessment System Product assessment is a method of assessing, at the design development stage, a product's impact on the environment. Murata has introduced its product assessment system not only in the product development and design stages, but also prior to the mass production trial and mass production stages, to confirm product environmental friendliness.

### Introduction of production assessment

( Number of assessments )

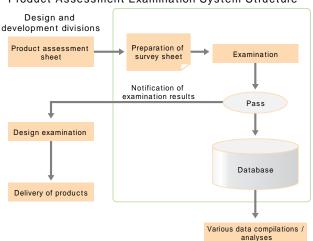
	Fiscal 2004*	Fiscal 2005	
Product	124	357	
Raw materials/method	7 4	178	
Total	198	535	

 $<sup>\</sup>star$  For fiscal 2004, numbers of assessments implemented over five months are indicated (term: November 2004 - March 2005).

#### Product Assessment Items

Classification	Item			
Product	Controlled substances			
	Downsizing			
	Reduction of main raw materials			
	Power conservation			
Production process	Controlled substances			
	Reduction of energy consumption			
	Resource and waste reduction			
Packaging and packing	Controlled substances			
	Resource and waste reduction			

#### Product Assessment Examination System Structure



### Toward Total Elimination of Environmentally Hazardous Substances in Products

Murata's products contain various substances. Since some of these substances may adversely affect the human body and the environment, we are aware of the urgent necessity of reducing and eventually eliminating the use of these substances. We at Murata call them "environmentally hazardous substances." Even concerning substances whose use is not prohibited by laws and regulations, we are also making voluntary efforts for their reduction and elimination.

### Adoption of Standards regarding the Use of Environmentally Hazardous Substances in Products

The Murata Group has established a Regulation Program for Environmentally Hazardous Substances in Products ("Product Regulation Program") so as to control chemical substances, classifying them into three ranks: substances prohibited in products, substances to be reduced, and substances whose reduction is under preparation.

Moreover, aside from groups of regulated substances, we manage the content of substances likely to be regulated in the future or that can be recycled and reused. We take this approach by instituting a policy for chemical substances whose content should be determined at the time of procurement.



Regulation program for environmentally hazardous substances in products

### Progress in Reducing the Use of Environmentally Hazardous Substances

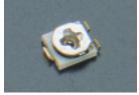
We are making progress in reducing the use of environmentally hazardous substances, in accordance with the product regulation program for existing products. As for newly developed products, we have established a system that confirms compliance with the Product Regulation Program during the design stage, so as to provide customers with products containing less environmentally hazardous substances.

Notably, we are implanting a project to aggressively reduce and eliminate the use of lead, hexavalent chromium, mercury, cadmium and specified brominated flame retardants subject to strengthened EU regulations.

As for halogenated flame retardants, whose reduction is not required by current law but is covered by our voluntary regulation program, first we focused our reduction efforts on additives in resins that are molded within Murata. In fiscal 2006, Murata is expanding the scope of its reduction targets to include additives in resins and plastics that are procured as molded components from suppliers. Given our smooth progress in these activities, we expect that we will attain our reduction targets for fiscal 2006.

### Examples of Murata's lead-free products

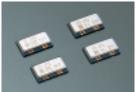


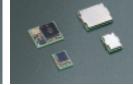


Chip EMIFIL® inductor type

Trimmer potentiometer (PVZ2A Series)

#### Examples of RoHS Directive-compliant products





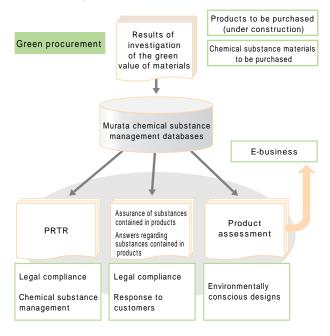
Piezoelectric vibrating gyroscope(GYROSTĂR®)

Bluetooth® modules The Bluetooth trademarks are owned by Bluetooth SIG, Inc., USA

### Compilation of an Information Database

Murata is compiling a database for use in a system to appropriately manage information on substances used in Murata products, including the amount contained. This database is used to ensure that specific environmentally hazardous substances restricted by laws and regulations are not contained in any Murata product, and to provide customers and governments with relevant information in a timely manner.

### System to manage information on chemical substances contained in products



### Procurement

Murata has carried out its own independent surveys and evaluated the environmental soundness ("greenness") of its suppliers. Based on these results, we preferentially procure goods from suppliers that have been actively working on environmental conservation activities.

### Green Procurement

At Murata, among goods to be procured, parts and materials used in production are procured through a green procurement system. Under this system, we evaluate the environmental soundness ("greenness") of suppliers of these parts and materials, and preferentially procure them from suppliers that have been actively working on environmental conservation activities.

Regarding the implementation of green procurement, we have compiled Murata's concept and requirements for suppliers into a document describing our green procurement standards, based on which we promote green procurement initiatives, with the understanding and cooperation of our suppliers.

Evaluating a Supplier 's " Greenness " Before we begin to deal with a new supplier, we conduct our own surveys to check, for instance, whether the supplier has properly established an environmental management system (e.g., if it has acquired third-party certification, such as ISO 14001 and KES\*) and whether the supplier can guarantee that it will not deliver parts and materials containing chemical substances prohibited by laws and regulations. We employ these criteria when considering whether to do business with a prospective supplier.

We also evaluate the greenness of current suppliers every year. For suppliers that have received a low evaluation, we will give instructions through audits to improve their environmental management. If there is no improvement even after we have provided such instructions, we consider ending our relationship with these suppliers. We have thus adopted a strict attitude concerning green procurement.

Evaluation Items of Suppliers' "Greenness" Environmental management system Management system for chemical substances Submission of examination forms concerning the six substances subject to the RoHS Directive

\*Standards for the environmental management system developed by the Miyako Agenda 21 Forum

Evaluating the "Greenness "of Materials As for materials (chemical substances, products and packaging) used in our products, Murata has established its own technological standards for prohibition or reduction of their use, according to laws and regulations as well as to customer requests. Before adopting these materials, we confirm that they do not include chemical substances prohibited by these technological standards.

Our expert staff stringently examines chemical substances that must be used and handled with care. We have introduced and implemented a system by which we register in our database only those chemical substances that have passed our inspection. We do not procure any chemical substance that is not registered in this database.

Management and guarantee of green procurement

> Evaluation the "greenness" of Materials Examination and prohibition of unregistered materials

Evaluation of a supplier 's "greenness" Audits and improvement instructions

Transaction contracts, written guarantees, etc.

### Green Purchasing

Murata has made group-wide efforts to promote green purchasing, which applies to certain goods falling within the specified category of office supplies and equipment not related to the production of Murata products. We define goods that comply with the Law on Promoting Green well as Purchasing, as goods environmental labels (e.g., Eco Mark; the mark which indicates the use of recycled paper; the green mark, etc.) as "green products." These products are given priority over others when we purchase applicable goods.

As of March 2006, the green purchasing ratio in our domestic sites reached 90% on an itemized basis. We are redoubling our efforts to achieve an even higher green purchasing ratio.

### Production

Environmental impacts resulting from production processes vary widely, including CO<sub>2</sub> emissions due to the use of energy, generation of wastes, and chemical substances to be controlled.

Murata has taken every possible measure to reduce environmental impacts from our production processes.

### Prevention of Gloval Warming

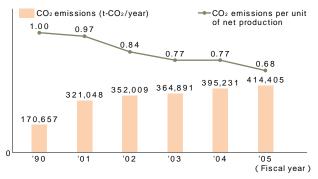
#### Present Status of CO2 Emissions

Murata actively implements initiatives to curb greenhouse gases - mainly CO2\* - that are emitted as a result of our business activities. In fiscal 2005, CO2 emitted from our plants and subsidiaries in Japan totaled 414,405 metric tons-CO2. In terms of CO2 emissions per unit of net production, this is a decrease of 68% from fiscal 1990 levels.

\*Murata does not emit the greenhouse gases other than CO2



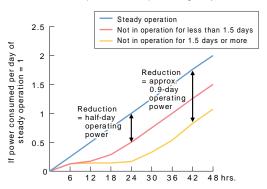
#### CO<sub>2</sub> emissions



### Initiatives for Energy Conservation on **Production Lines**

- 1. Mesh belt furnaces consume large amounts of electric energy. Formerly, even on days when plants were not in operation we ran our mesh belt furnaces at the same temperature as on plant operating days. By optimizing the temperature decrease/increase profiles, we can now run the mesh belt furnaces at a low temperature on non-operating days. We also improved the conditions under which heat treatment equipment is used. These measures have enabled us to reduce CO2 emissions by 4,766 metric tons per year.
- 2. We have commenced activities for energy saving in production facilities by actually measuring the energy consumption of each production facility and analyzing consumption by facility type.
- 3. Continuous efforts are also under way to design production energy-saving facilities. introducing high-efficiency production facilities, we have reduced CO2 emissions by 5,520 metric tons per year.

Energy-saving by improving mesh furnace operating conditions on plant non-operating days



### Energy-saving Initiatives regarding General **Facilities**

Also as concerns general facilities, we are actively committed to energy conservation by introducing cogeneration systems and through other means. [For details, refer to page 11 and 12.]



Energy Audit

Future Initiatives to Be Addressed

Murata has set itself a goal for fiscal 2010 of reducing CO2 emissions per unit of net production in Japan by 25% compared to fiscal 1990 levels. In fiscal 2005, our Company achieved 32% reduction per unit of net production, greatly exceeding the original target. We attribute this result primarily to a high rate of capacity usage, so can't be certain of automatically attaining our target for fiscal 2010.

To ensure the achievement of our fiscal 2010 target, we horizontally communicate information on individual initiatives implemented at each office and plant, so as to share existing expertise throughout the entire Company. Moreover, we strive to further reduce CO2 emissions through active replacement of current equipment with more energy-efficient models.

### Resource Conservation and Waste Reduction

Present Status of Waste Generation

Murata is committed to recycling wastes generated at its offices and plants. In fiscal 2003, we achieved our zero emissions target\* at our 21 plants and subsidiaries in Japan. Now that we've achieved our zero emissions targets, our next step is to reduce waste generation itself. To initiate that effort, Murata established the Resource Conservation & Waste Reduction Subcommittee in fiscal 2004.

Under the Subcommittee, we also organized workshops that respectively work on the themes of reducing waste fluids, waste plastics and waste ceramics. All these types of waste are produced in large quantities, so have room for reduction.

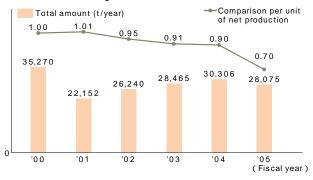
In fiscal 2005, the amount of waste generated in our offices, plants and subsidiaries in Japan totaled 28,075 metric tons, an approximately 7,200 metric ton decrease from fiscal 2000. In terms of waste materials generated per unit of net production, this is a decrease of about 30%.

As regards the material recycling rate, in fiscal 2005 we improved the rate to 99.98% by changing the disposal method of waste formerly handled by thermal recycling.

\* Murata's definition of zero emissions: Defined as zero direct landfilling of waste as well as zero landfilling of waste matter remaining after intermediate treatment (i.e., 100% recycling rate). However, Murata's zero emissions and recycling rate targets exclude waste matter that the Company is unable to process on its own, such as excess sludge in remediation tanks.

### DATA Amount of waste generation (in Japan)

#### Amount of waste generation



Reducing Waste Acid/alkali and Waste Plastics Of all the types of wastes generated at Murata, waste fluids and waste plastics are particularly large in quantity, comprising approximately 70%. Therefore, our efforts to reduce waste generation focus particularly on these types of wastes.

In fiscal 2005, our Yasu Plant worked to reduce waste fluids, successfully reducing them by about 120 metric tons/month.

Moreover, Fukui Murata Manufacturing Co., Ltd. and Izumo Murata Manufacturing Co., Ltd. installed additional peeling processors to recycle film adhering to ceramic waste produced during the manufacturing process. This enabled us to recycle annually about more than 1,200 tons of PET film into raw material for making chemical fibers and other products.



Evaporator of concentrator for alkaline and acid waste liquids

Sharing of Information on Waste Reduction To promote waste reduction and improve recycling levels, Murata regularly organizes meetings among staff in charge of waste management in respective plants, offices and subsidiaries. At these meetings, participating members exchange views, share information and conduct other activities noted below:

Inspections of waste management carried out at each plant, office and subsidiary

Presentations and information sharing on cases of waste reduction

Exchange of views among staff in charge of waste management

Lectures on the latest in waste management by experts invited from outside the Company

### DATA Recycling rate (in Japan)



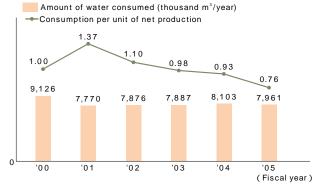
Meeting to discuss waste reduction (Sabae Murata Manufacturing Co., Ltd.)

#### Reducing Water Consumption

In focusing our attention on plants and processes that consume large amounts of water, we are promoting the cyclic use of groundwater by various means. For example, we reuse cooling water for vacuum pumps by re-cooling it with heat exchangers. Consequently, in fiscal 2005 the amount of water consumed at our offices, plants and subsidiaries in Japan was 7.96 million m3, a reduction of 1.17 million m<sup>3</sup> from fiscal 2000.

DATA Water consumption (in Japan)

#### Water consumption



### Management and Reduction of Environmentally Hazardous Substances in **Production Processes**

Among the various chemical substances used in Murata's production processes, those with hazardous properties are strictly managed, from procurement and use to release. We are also actively working to reduce the use and release of these chemical substances to ensure that we can minimize their environmental impact during our production activities.

### Management of Environmentally Hazardous Substances

Murata has established a system that requires prior registration of chemical substances to be used in mass production. By linking this registration system with Murata's material procurement system, we perform chemical monitoring to prevent the purchase of unregistered chemical substances. The registered information is also used to ensure the appropriate management of chemical substances and the reduction of environmentally hazardous substances.

The Japanese Pollutant Release and Transfer Register (PRTR) Law stipulates 354 substance groups subject to reporting. Of these substance groups, the Murata Group handled more than 1 metric ton of 24 different substance groups, including toluene and xylene, in Japan in fiscal 2005.

Pollutants Released and Transferred Subject to the PRTR Law (Total for Japan)

### Reduction of Environmentally Hazardous Substances

Among the chemical substances used in our production processes, those with the potential to greatly affect the environment are subject to Murata's unique voluntary regulation program, which was established in 1997. We continue to target the reduction and elimination of substances specified in our voluntary regulation program. Under the program, chemical substances are ranked according to their degree of hazard. The program stipulates prohibition or reduction of 157 substance groups in total.



Voluntary regulation program for environmentally hazardous substances to be used or released in production process

### Reducing Atmospheric Release of VOCs

As a result of the amendment of Japan's Air Pollution Control Act, beginning in April 1, 2006, enterprises engaged in business activities that release and disperse volatile organic compounds (VOC) are required to track and reduce VOC emissions.

In fiscal 2005, Murata installed regenerative thermal oxidizers (RTOs) at its Yasu and Yokaichi Plants. With introduction of these RTOs, which commenced operation in fiscal 2006, we expect to curtail VOC atmospheric release by more than 200 metric tons annually. Murata has installed a total of nine RTOs, including the above-mentioned two units. This exemplifies the Company's voluntary efforts to actively reduce atmospheric release of VOC, even prior to legislation implementation.



Atmospheric Release of Major Substances Subject to PRTR (toluene and xylene)



Regenerative thermal oxidizer (RTO)

### Dealing with Environmental Risk

We are aware that among the various potential environmental risks involved in Murata's activities. chemical contamination is of particular concern. The Murata Group works to prevent such risks by countermeasures, including facility preparation and employee training. We also promote initiatives to reduce other environmental risks, such as waste and related problems.

#### Countermeasures to Prevent

Contamination by Chemical Substances We are preparing facilities intended to eliminate any impact on the surrounding environment in order to minimize potential environmental risks of Murata's business activities, particularly in the event of accidents. With special consideration for the scale and period of impact, we have established the following four voluntary standards for storing and transporting chemical substances within plant facilities.

- 1. Prohibition against Underground Storage Tanks In principle, storage tanks for fuels, organic solvents, acids, alkalis and waste liquids; and wastewater tanks for treating wastewater shall be located above ground. If it is unavoidable that a tank be placed underground due to legal requirements, it shall be a double-walled tank.
- 2. Permeation Barrier Coating Locations where fluids such as fuels, organic solvents, acids, and alkalis as well as waste oil are handled shall be provided with a bed made of a permeation barrier coating or stainless steel.
- 3. Prohibition against Underground Piping Pipes for transporting fluids such as fuels, organic solvents, acids and alkalis as well as waste liquids shall be located overhead.
- 4. Emergency Containment Structure Workplaces where liquids are received or where waste liquids are discharged to or from tank trucks or the like shall have a structure for immediately containing any leakage should an accident occur.

Scheduled Monitoring Industrial Waste Disposal Murata's plants and subsidiaries entrust the disposal of industrial wastes to licensed specialist companies. At fixed intervals we inspect their disposal sites in Japan and overseas, to ensure proper disposal.



Inspection of industrial waste disposal company

Training for Proper Emergency Measures in the Event of an Accident

To minimize environmental risks in the event of a natural disaster or serious accident, we regularly implement training for employees to deal with such emergencies.

**Environmental Accidents and Complaints** Should a serious environmental accident or complaint arise, employees are mandated to immediately address it and report to the Head Office of Murata Manufacturing, so that we can share the reported information and implement horizontal countermeasures to prevent similar accidents from occurring at subsidiaries. In fiscal 2005, there were no significant accidents or complaints related to environmental issues.

### Remediation of Soil and Groundwater Contamination

To clean up soil and groundwater contamination generated by Murata's past business activities, Murata has undertaken surveys and countermeasures ahead of other companies. We are actively implementing measures targeting early stage completion of the remediation (decontamination), by taking steps toward eliminating the use of chlorinated organic solvents such as trichloroethylene. To be more specific, by the time groundwater permeation was prohibited according to the terms of the 1989 Water Pollution Prevention Law, 17 of Murata's 22 production plants and ceased subsidiaries had already trichloroethylene. Furthermore, by 1998, use of the five specified types of chlorinated organic solvents including trichloroethylene had been eliminated throughout the Company.

In 1991, Murata introduced up-to-date technology to voluntarily undertake detailed surveys of soil and groundwater contamination in all plants and subsidiaries. As a result of this effort, it was concluded that 14 of the Company's 36 plants and subsidiaries had to institute remediation measures to remove contamination by chlorinated organic solvents.

Our Efforts to Promote Remediation

With the aim of completely remediating soil and water contamination at the earliest possible date, our plants and subsidiaries with relatively high pollution densities are actively implementing new remediation measures through the application of new technologies, in addition to ongoing remediation measures.

We had accelerated remediation at seven sites by fiscal 2005. For each site, we use one of three different remediation methods: the On-site Bio Method, the On-site Iron Powder Method or the Onsite Oxidation and Decomposition Method, depending on soil properties and the density and source of contamination.

#### On-site Bio Method

This method decomposes chlorinated organic solvents by injecting nutrients into the groundwater, in order to cultivate microbes present in the soil under anaerobic conditions.

### On-site Iron Powder Method

Soil and iron powder are mixed on-site. The reducing power of metallic iron deoxidizes, decomposes, and renders harmless chlorinated organic solvents in soil.



On-site Iron Powder Method

On-site Oxidation and Decomposition Method This is an oxidation and decomposition method using potassium permanganate. This method entails the direct injection of hydrogen peroxide into the groundwater, which directly oxidizes, decomposes and renders harmless various chlorinated organic solvents.



On-site Oxidation and Decomposition Method

#### State of Groundwater Remediation

At 14 polluted sites that were deemed in need of remediation as a result of Murata's own survey, we drilled wells along the borders of the sites so as to measure data on trichloroethylene and cis-1,2dichloroethylene. By fiscal 2005, we completed cleanup on two plants, and stopped operation of the remediation equipment at one plant, which is now in the stage of confirming the cleanup completion. Although there are still fluctuations within the allowable range at some plants and subsidiaries, the pollution level has been on a downward trend in general, and our cleanup efforts are progressing.



DATA State of groundwater remediation

### Allocating Reserves to Cover All Remediation Costs

Completion of all remediation (decontamination) measures entails very high countermeasure costs. For business accounting purposes, Murata has carried out a trial calculation of the full cost of remediation measures to ensure that all contamination has been removed.



DATA Soil and groundwater remediation costs

### Physical Distribution

To minimize the environmental impacts arising during distribution and delivery of Murata products to customers, we have implemented measures to promote modal shift (shifting to more environment-minded transportation) and reduced packaging.

### Reduction of Environmental Impacts Arising from Distribution

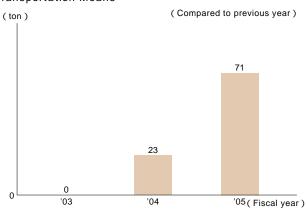
CO<sub>2</sub> emissions due to fuel consumption constitute the largest portion of the environmental impact arising from Murata's distribution activities. To reduce such environmental impact, we implement various measures to improve transportation efficiency, so as to promote a modal shift. We are committed to reducing packaging materials used for product shipment, and have set goals for fiscal 2006 of reducing fuel consumption and shipment packaging materials by 20%, in net sales units, from fiscal 2000 levels.

### Measures to Reduce Environmental Impact **During Transportation**

In fiscal 2005, Murata changed means of transportation from trucks to railroads on three additional transportation routes, and commenced joint delivery on one transportation route. This enabled Murata to reduce CO2 emissions by 71 metric tons-CO2 from fiscal 2004. In terms of per unit of net sales, we reduced CO2 emissions to 82% of fiscal 2000 levels. Murata has thus far encouraged the companies to which we entrust our product delivery to practice energy-saving driving and has promoted a modal shift. To further reduce CO2 emission, it is necessary to improve load efficiency per truck and augment joint delivery. With this in mind, we began reorganizing our distribution system in Japan in fiscal 2006.

DATA Trends in CO<sub>2</sub> Emissions from Distribution (in Japan)

### Reductions in CO2 Emissions Due to Changes in Transportation Means



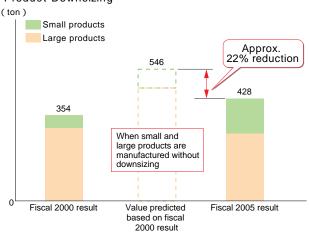
### Measures to Reduce Packaging

Product downsizing achieved through technological innovation also enables us to reduce the use of packaging materials. For example, the miniaturization of chip monolithic capacitors, Murata's primary products, helped reduce their packaging materials by approximately 22% over the past five years. In fiscal 2005, we reduced packaging material use by 80% per net sales unit compared to fiscal 2000 levels, already surpassing our target for fiscal 2006.

Murata also focuses on promoting the use of returnable cardboard boxes for packaging: returnable boxes are already used for in-house delivery of taping reels at the Company's eight plants, about half of all the boxes used for that purpose. We are continuing our efforts to realize 100% use of returnable boxes for taping reels delivered within the Company, and encourage the use of returnable boxes to deliver products to

DA TA Amount of packaging materials used

### Reduction in Packaging Materials Due to **Product Downsizing**



### Office Activities

We are striving to reduce copy paper use and save energy. Moreover, each and every Murata employee is aware of the importance of environmentally friendly practices to be followed in everyday work.

### Activities to Reduce Environmental impact in Offices

Beginning in fiscal 2005, Murata introduced ISO14001 standards for activities in offices, including the Head Office, Tokyo Branch and sales branches. On the basis of these standards, initiatives are under way for copy paper reduction, waste separation and energy saving. By reviewing copying needs and using the back side of scrap paper, in fiscal 2005 copy paper consumption was collectively reduced by 30% from fiscal 2004 levels at the Head Office, Tokyo Branch and other sales branches.

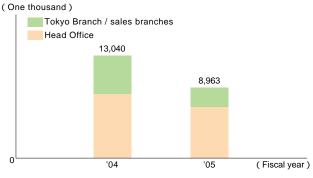
At sales divisions, we encourage customers to convert to RoHS-compliant products, and promote sales of smaller products. The Functional Staff Division promotes environmental activities in the industry group, while always seeking what we can do, together with our stakeholders, to positively influence the environment in our day-to-day operations.

### DATA CO2 Emissions in Offices



Waste separation at office

### Use of copy paper



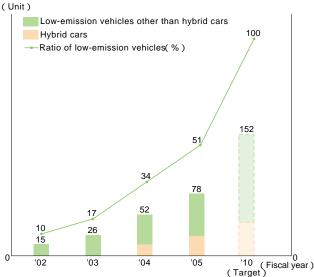
### Introduction of Low-emission Vehicles

Murata has implemented measures to switch vehicles for business use to low-emission vehicles. In fiscal 2005, we introduced 11 hybrid vehicles. We will further promote the changeover to hybrid cars and other types of low-emission vehicles, and are planning to complete this conversion by the end of fiscal 2010.



Low-emission vehicles

### Introduction of low-emission vehicles



### Relations with Our Customers

Murata always pursues products and services that satisfy our customers. We have established systems that enable us to identify and quickly respond to diversified market needs, as well as to further improve the quality of our products and services.

### The Concept of Customer Satisfaction

To evolve as a manufacturer of electronic components and modules, we must grasp trends in the electronics industry and provide products and services that satisfy our customers. To these ends, we must meet various conditions, including: quickly grasping customers' needs and offering problemsolving measures, providing excellent products and services, setting proper product prices and ensuring timely delivery. In recognition that strengthening our relationship of trust with our customers is one of our management priorities, we continuously reform our work-related and other systems, company-wide, with the objective of increasing customer satisfaction.

### Quality Management Policy

Murata has established a Quality Management Policy in order to provide high-quality, reliable products that satisfy our customers. We have posted this policy in all workplaces, so that each Murata employee can always be aware of it. In addition, Murata has its employees carry with them a card on which this policy is written, to keep every employee informed of it.

### **Quality Management Policy**

We remain committed to the continuous development of unique products and the cultivation of new areas of expertise. Our underlying approach is our belief that "better equipment is made from better parts and better design, and better parts are made from better materials and better processes." With this belief, we consistently manage every stage, including design, material selection, procurement, production, sales, and servicing in cooperation with all members who comprise the Murata Group -from top management to individual employees- by employing the Deming circle. In this way, we can economically produce quality products that meet market needs with full consideration for the natural environment.

### Deming Circle

At Murata we have adopted the Deming circle as a concept underlying our quality control. This is the Plan-Do-Check-Action concept, which is applied at every stage, from planning & design and production to sales, survey and servicing, to ensure that we produce and deliver products that meet market needs at reasonable cost. Through this approach, we continuously augment the quality of our products and services, so as to give greater satisfaction to our customers.

#### **Deming Circle** Carefully surveying Planning and and studying customers' demands designing high quality products that can meet customers' demands regarding product quality Plan Action Survey and Planning and servicing design Do Check Sales Production Selling products to customers and surveying their

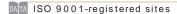
Producing the planned products

### Quality Assurance System

satisfaction levels

The Murata Group inside and outside Japan has received ISO 9001 certification, the international quality management standard. We are also making progress in acquiring ISO/TS16949 certification, an international standard specific to the automotive industry.

As a global corporation, the Murata Group has been strengthening its systems to provide products of uniform quality so that customers around the world can use Murata products with complete peace of mind.

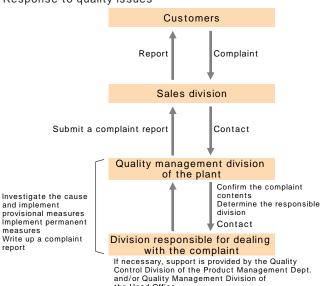


# Response to Quality Issues

customers' proposals. requests improvement and complaints regarding products provide us with precious information. Making use of such information, we can further improve the quality of Murata products to further satisfy our customers, and make our products more competitive in the market. We therefore strive to address customer demands from the viewpoint of our customers, and to meet their demands in a prompt manner.

Murata has unified the management of complaints from our customers. We have established a system where, when a customer complaint is received, a salesperson in charge enters the information into the database so that the information can be simultaneously accessible by all Murata offices and plants worldwide. If there is a product returned to us due to a customer complaint, our production quality management division and other relevant sections investigate and clarify the cause of the problem and take measures to prevent its reoccurrence. Records of complaints that have been addressed are distributed to all divisions concerned, and then stored in the quality control division so that these records can be utilized for product quality improvement activities. Records describing the complaint situation and the countermeasures taken are compiled by the quality management division, and then reported to the management level.

### Response to quality issues



the Head Office.

# Marketing System

Murata has established an original marketing system based on three roadmaps for market, products, and technology. We create roadmaps for mid-term market trends, products required by the market, and technologies necessary to develop such products. This roadmap strategy enables us to always provide the most advanced products and technologies to satisfy our customers.



# Design-in Activities

Murata allies itself with electronic device manufacturers to develop technologies. Through these relationships we try to forecast what kinds of features will be required in the next generation. Electronic devices face all kinds of challenges in terms of enhanced and added features. To help our customers tackle these challenges, it is necessary for us to know customers' needs from the early stages of device development. Murata establishes mutually trusting relationships with its customers, sharing each other's information, and assists customers in coming up with solutions early in the game.

# Relations with Our Employees

Murata strives to provide a working environment in which all employees can work with pride. As part of such efforts, we have established a personnel system that demonstrates respect for each individual employee in order to ensure that all employees can fully express their abilities.

# Respect for Human Rights

Murata has established a personnel system to provide a working environment free from discriminatory treatment on the basis of race, beliefs, gender, religion, nationality, language, disease, birthplace or other reason, so that the personality and individuality of each employee can be respected. Our Company complies with laws and regulations concerning all our business operations in each country where Murata conducts its business activities. No overseas Murata plant or subsidiary employs child labor or forced labor. We also seek to establish a working environment based on mutual understanding and trusting relationships among employees.

# Stable Labor-management Relations

While building up labor-management relations of mutual trust based on a labor agreement, we aim to foster both the development of the Company and stabilization of the livelihood of Murata employees.

# Equal Opportunity and Diversity in Employment

While complying with relevant laws and regulations, Murata has improved its employment environment to ensure that no disparity is generated in employment, treatment and education due to gender, race, physical disability or other similar factors. We thus provide a working environment where diverse employees can fully express their



DATA Ratio of disabled persons' employment

### **Employment of Female Workers**

Murata employs persons who can play an active role on a global basis, regardless of gender. In recent years, Murata has had a policy of actively hiring female workers in particular. In fact, female workers account for half of all new employees who joined Murata Manufacturing in fiscal 2006 as general white-color staff.

### Supporting Employees in Juggling both Work and Family

Murata also makes special efforts to support its employees in juggling both work and family. We have established systems to help motivated employees improve their careers, overcoming situations in which family responsibilities have increased because of childbearing, childcare, elderly care, etc.



TA Number of employees who took family care/childcare leave

### Support systems for balancing work and family

#### Special leave for fertility treatment

Up to 20 days of special leave (with pay) can be taken to receive fertility treatment.

\*Fertility treatment is included in the scope of disease/injury treatments that qualify for special leave

Maternity leave before and after childbirth Up to 8 weeks before and 8 weeks after childbirth

#### Paternity leave

A male employee whose spouse gives birth can take up to five days off within one week before and two weeks after childbirth, including the day of childbirth.

- (1) Of the following periods, whichever is longer:

  -Until the end of the fiscal year when the employees' baby becomes one year old. It is possible to extend this period by one month (maximum period: 2 years and 1 month).

  -Until the end of the fiscal year when the employees' child becomes
  - 18 months old.
- (2) Until the child becomes one year old, childcare leave can be taken even if the employee's spouse can take care of the child.

### Decreased working hours for childcare

Until the employee's child enters an elementary school, the employee can shorten her/his working hours by up to 2 hours per day.

### Sick or injured childcare leave

Up to five days off per year to take care of a preschool-aged child when he/she is sick or injured.

### Family care leave

A total of up to 365 days off to take care of a family member. The number of care leaves is counted by each condition of the family member in need of nursing care.

### Decreased working hours for family care

Employees can shorten their working hours by up to 2 hours per day, up to a maximum of 365 days, combined with their family care leave.

### Active Local Employment and Human Resource Development

Murata operates over 50 subsidiaries in Japan and in overseas countries. We carry out our business activities with the idea that we should play a role in the development of the electronics industry in countries where our subsidiaries are located, and therefore conduct organizational operations by employing various types of personnel. At overseas sites, we are also active in employing and recruiting local people,

and implementing management training programs for locally hired managerial staff, ranging from newly appointed managers to senior managers, with the aim of sharing our ideas with them.



Overseas local manager training

Re-employment System for Retired Workers In advance of the revision of the April 2006 Law for the Stabilization of Employment of the Aged, in April 2003 Murata introduced a re-employment system for employees who resigned upon reaching the mandatory retirement age. This system was introduced in response to phased postponement of the age at which public pensions can be received in Japan, and to make use of the expertise and skills of older workers. Since April 2006, Murata has begun to apply this system in its domestic subsidiaries, so as to make the system common to Murata Group companies in Japan.



DA TA Number of persons re-employed

# Personnel Systems

Murata has introduced a fair personnel system based on the principles of merit (employees' abilities and performance) and human dignity. As an electronic component manufacturer, Murata has various types of workplaces and business staffs, such as R&D, production, sales, and functional staff. We provide opportunities for each employee to express his/her abilities to the fullest, in an environment that is suitable for individual employees.

### Job Rotation

At Murata, after one year of service in departments to which new graduates have been assigned, our personnel division staff holds a meeting with them to review their aptitudes, intentions and the job contents at their currently assigned departments, in order to verify the appropriateness of their assignment. We have also adopted a career development program, under which most employees, three to five years after joining the Company, are provided with opportunities to experience various tasks and working environments. The purposes of this program are to make these employees aware of their potential that even they themselves may not have recognized, and to make use of the know-how and perspectives they have developed through their previous work experience, for the job at their newly assigned departments.

Moreover, Murata has a unique human resource development system that specifies a key job category in which each employee will be mainly engaged, in the course of developing his/her career from a long-range perspective. We plan and carry out job rotation for individual employees in view of their key job category, so as to expand their job categories and increase their abilities.

### Management by Business Objectives

Murata supports the individual initiatives of its employees. To provide a working environment where each employee can be motivated and fully express his/her abilities, since 1991 we have utilized a system of management by business objectives. Under this system, in line with Company, department and section policies, employees set themes for themselves regarding their jobs, and draw up measures and plans to achieve their objectives, through discussions with their After six months have passed, employees conduct self evaluations of how far they have implemented their measures and plans and the results they have obtained. Their superiors then evaluate the submitted results and the processes employees have gone through, and reflect the evaluation results in their bonus. The evaluation results are fed back to the employees so that they can utilize the results to plan their future tasks toward further developing their capabilities.

### System for Highly Specialized Personnel

A conventional personnel system is based on the idea that if someone gets promoted to a certain level, he/she would eventually become a manager, so are thus focused on a managerial career track. However, while some employees are indeed suited as managers, some are suited as specialists, who will pursue specific professional technologies. We have therefore introduced this system, which allows employees to select their career track leading to either management or as a highly advanced specialist, at a certain stage of promotion. In the future, we will continue reviewing our personnel systems, and strengthening our efforts to create a work environment where employees can adequately express their abilities and play active roles.

### Discretionary Work System

At Murata we take an approach of evaluating personnel not by the number of hours worked but by their job performance. Murata has therefore introduced a discretionary work system for engineers who are deemed eligible by the Company. This system leaves the methods of doing the work and distribution of work hours, to the discretion of these eligible workers. This system allows the employees to work flextime as well as work at home. Above all, this system values their creativity.

### In-house Staff Recruitment System

Murata introduced the in-house staff recruitment system in April 2006. By providing employees with opportunities to select their career path by themselves, this system cultivates a corporate culture that maximizes employees' venturous spirit and independence, and that realizes timely assignment of personnel in response to various business needs.

# Relations with Our Employees

# **Education and Training Systems**

### Human Resource Development to Maximize Employees' Capabilities

Murata believes that the key aspects of human resource development are: self-directed personnel, personnel who display individuality with a venturous spirit, and personnel who value customer satisfaction and cooperation. To strongly and effectively support individual employees in developing their capabilities, Murata operates its own education system, which offers employees specialized training at each rank, from entry level to management level. In its training programs for newly hired employees, Murata helps new employees acquire the knowledge and skills required to become professional personnel who can play active roles in the business world. Even after this basic training period, various training programs are provided, such as education according to each job step, and functional training by type of job. By combining these various training programs, Murata facilitates the development of all its employees' expertise, skills and management capabilities.

### Training for Core Management Staff

The roles to be played by management staff have expanded and become more sophisticated, thereby assuming greater importance. As part of our levelbased training programs, we also provide training for management staff. We have introduced programs to train business leaders who are able to promote business globally from the same viewpoint

as that of top executives. We have also adopted a coaching style that values interactive communication to help management staff improve their own capabilities while developing their subordinates' abilities. Through these education programs, Murata aims to enhance the ability level of its entire workforce.

### Training for World Class Technicians and Engineers

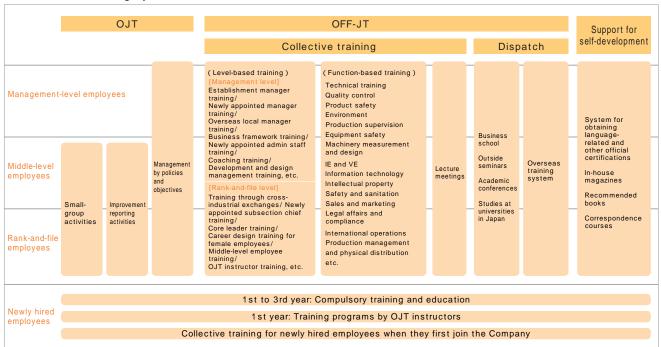
One important element that supports Murata is the Company's advanced technologies, which are applied in materials, finished products, production equipment and so forth. Murata focuses on nurturing personnel who are knowledgeable regarding the world's top-level techniques. As part of our function-based training, we provide programs to train technicians and engineers in scientific and practical perspectives and expertise so that they can make full use of these abilities in their specialized fields. These programs cover various topics, from general technological education to training toward practical-level expertise in specialized areas. Moreover, to improve the level of Murata's essential technologies, we promote technical information sharing in coordination with our original set of offline activities\* called "STEP (Strategic Technology Program)."

\*Offline activities: Activities conducted in small groups that carry out R&D and hold discussions by technical field, among employees who gather



DATA Level-based training, function-based training, and other training programs

### **Education and Training Systems**



### Training to Develop Personnel with Global Capabilities

Murata has an overseas training system for young employees, who will play a leading role in the Company in the future. By allowing them to live in and experience business in foreign countries, this system trains young engineers and businesspersons to develop international-level capabilities. Not only do we dispatch young engineers to overseas universities and research institutes; we also send other young staff overseas to enable them to acquire MBAs, languages and other skills. In today's increasingly borderless business world, regardless of job type, our employees should develop the capabilities they need to engage in overseas business. Murata therefore encourages our employees to accumulate a variety of experiences so as to develop a global perspective and become internationally minded.

# Occupational Health and Safety

Murata established its Basic Rules for Occupational Health and Safety in 1987. We carry out activities to realize a workplace free from workrelated injuries and deaths, as well as to create a pleasant working environment for all.

Addressing Work-related Risk Reduction It is said that the fundamentals of manufacturing lie in the "4Ms" (men, machines, materials, and methods). Focusing attention on the 4Ms, Murata takes measures to assess potential work-related risks in advance and prevent work-related accidents from occurring.

Regarding work that humans are involved in (men and methods), we have compiled a list of work entailing potential risks of accidents. We have estimated the levels of damage that may be suffered should an accident occur, and have expressed these damage levels numerically.

For task whose potential damage level is deemed not permissible, we have taken measures to reduce the risk by improving relevant equipment, revising the work, wearing protective gear, and other means.

Concerning equipment (machines), we have established a check system for inspecting equipment health and safety. Before introducing new equipment, we examine if it complies with Murata's safety rules as well as relevant laws and regulations. Therefore, only equipment whose safety has been confirmed can be installed.

As for materials, we use our safety review system to inspect all materials to be used in producing Murata products. Under this system, we check the

safety of all materials that Murata uses based on Murata's own rules as well as relevant laws and regulations.

Eliminating Work-related Injuries and Fatalities At Murata, fiscal 2005 saw the occurrence in Japan of five work-related accidents (requiring four or more days off). Murata's frequency rate for workrelated injuries and deaths is lower than the average for the manufacturing industry in Japan. We will continue to further improve our work environment, with the aim of reducing work-related injuries and fatalities to zero.



Frequency rate for work-related injuries and fatalities

# Employee Health Management

Promoting the health management and fitness of every employee will make our Company healthy. In other words, a healthy company is created by having healthy employees. Murata therefore endeavors to create a work environment where each employee can cheerfully work with hopes and dreams, while giving consideration to fostering positive mental health and preventing overwork.



Medical room (Head office)

### Mental Health Initiatives

Promoting mental health is important so that employees have a sense of self-fulfillment and are able to conduct creative activities. It can also contribute toward enhancing the productivity and vitality of the workplace.

For these reasons, Murata continues to strengthen its mental health consultation system. Additionally, we have commenced a mental health counseling service by using an external organization to support employees' positive mental health.

# Relations with Our Suppliers

At Murata, we take the approach that good electronics begin with good components, and good components begin with good materials. In this spirit, we strengthen partnerships with suppliers who adhere to ethics, laws and regulations, who emphasize product quality and timely delivery, and promote environmental protection.

# Fair and Just Purchasing Activities

Murata believes that it is important to establish such business relations with suppliers that enable mutual prosperity. To build trusting relations with suppliers and promote close communication, we have prepared a business transaction guidebook that presents Murata's basic purchasing attitudes and mechanisms.

We have also established a website dedicated to our suppliers, to show our basic business transaction rules, requests and PR. We will continue closely exchanging information with our suppliers, so as to strengthen our partnership with them.

### Murata's Purchasing Policies (excerpt)

### (1)Purchasing attitudes

Murata's buyers will be polite to our suppliers, and conduct their dealings with suppliers in a fair, just, and sincere manner.

- Murata's buyers will responsibly carry out purchasing activities, practicing good manners and following the dictates of common sense.
- will friendly · Murata's buvers maintain relationships with suppliers, but have no personal interest with them.
- Murata's buyers accomplish dealings compliance with relevant laws, rules, and in-house regulations.

### (2) Dealings with suppliers

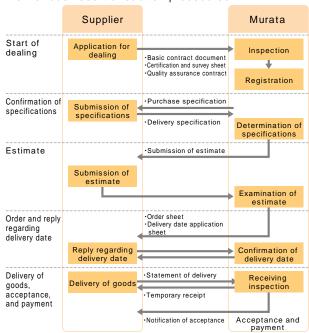
- Based on rational standards, we will evaluate and select suppliers fairly and justly.
- We will not receive gifts of money or other valuable articles from suppliers, and will make no personal requests of them.
- · We will not receive treatment or entertainment from suppliers that defies social common sense.
- · We will not force suppliers to purchase Murata
- · If suppliers provide us with information that is confidential, we will strictly manage the information and maintain its confidentiality.
- · We will promote green procurement, always taking environmental protection into account.

# Basic Attitudes That Murata Requires Suppliers to Take

Murata respects ethics, laws and regulations, and emphasizes business transactions that honor integrity. We therefore seek to deal with suppliers who also attach importance to ethics, laws and regulations in their basic management philosophy. Murata requires of its suppliers the following characteristics in this regard:

- Complies with laws and regulations as well as social norms
- Conducts sound business management
- Emphasizes quality, timely delivery and stable supply
- Emphasizes initiatives targeting reduced environmental impact (green procurement)
- Emphasizes Value Engineering\*
- Emphasizes providing information on new technologies and
- Emphasizes efforts to accelerate material procurement
- Strictly safeguards highly confidential information
- Emphasizes IT application
- \*The Society of Japanese Value Engineering defines value engineering as "a systematic team approach to conducting function-oriented research on products and services in order to achieve the required function at the lowest life cycle cost.'

### Flow of business transaction procedures



# Relations with Society and Our Communities

We want our presence to be a source of joy and pride in the communities in which we operate. We continually conduct corporate citizen activities, with the aim of contributing toward better community building.

# Local Community Activities

Organizing Concerts Murata holds Classic concerts at a hall newly built in Murata's Head Office in 2004, to which are invited professional orchestras from various regions, including Nagaokakyo City, in which Murata's Head Classic concert Office is located.



Tree-planting Volunteers in Shenzhen, China As part of our efforts to contribute to the local community where one of our sales offices in China is located, we conducted tree-planting volunteer activities. A total of 20 people participated in the tree planting, including Japanese staff members and Chinese local employees.

### Visit to nursing homes for the elderly in Singapore

We have donated to nursing homes for the elderly in local communities in Singapore. Our employees have worked as volunteers at these homes, holding lunch meetings and singing songs, which were enjoyed by the elderly residents.





Tree-planting volunteers

Visit to nursing home for the

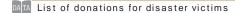
### Academic Support Activities

### Murata Science Foundation

The Murata Science Foundation was established in February 1985, with the objective of promoting science for the public by making use of the expertise accumulated in the course of Murata's business activities. Each year, the Foundation offers support and financial aid for research in the natural sciences, humanities and social sciences. In fiscal 2005, the Foundation provided financial aid totaling ¥59.75 million for 58 research projects, 10 study groups and 4 overseas dispatch programs.

### Contributions and Donations

Monetary Relief for Natural Disaster Victims In fiscal 2005, Murata send monetary relief via the Red Cross Society to support victims of natural disasters, such as Hurricane Katrina, which struck the U.S., and the Northern Pakistan Earthquake.



Sponsoring the "Wakaba Cup" Murata has sponsored the Wakaba Cup (National Elementary School Student Badminton Championship) every year since the 7th Championship was held in 1992 in Nagaokakyo City, Kyoto, home of Murata's head office and main plant.



Wakaba Cup

Donation Supporting HIV/AIDS Prevention Through Project HOPE Japan, an authorized NPO that provides international medical support, Murata donated to facilitate HIV/AIDS prevention activities in Thailand.



Education to prevent HIV/AIDS

Donation to the Ogura Hyakunin Isshu Cultural Foundation

Murata donated to the Ogura Hyakunin Isshu Cultural Foundation, a fund to construct a monument inscribed with a tanka poem. This donation is aimed not only at helping promote tourism in Kyoto, where Murata is located, but also to disseminate worldwide the greatness of Japan's classical literature.

# Relations with Society and Our Communities

# Tree Planting

Murata has established a group-wide greening policy and has set mid-term greening programs for each plant, so as to actively promote tree planting in factory premises.

Data relating to the trees and greenery we have planted, including plant names, varieties, areas where they are planted and their number, are compiled in a database that is used to systematically manage and maintain our green

In fiscal 2005, Murata's Head Office underwent inspection to obtain certification under the Social and Environmental Green Evaluation System (SEGES\*), as part of its efforts to ensure more efficient management of green areas. We plan to introduce this System to other major plants in Japan in the future.

\* SEGES: A system under which a third party evaluates and certifies favorable green spaces created by enterprises or other entities, and the activities conducted in those spaces

Protection of Natural Forests and Rare Plants Murata's Yokaichi Plant has a forest of Japanese red pine, and Izumo Murata Manufacturing possesses a forest of Japanese red pine and a grove of bamboo. We consider these natural entities to be important elements of the local natural environment. We take regular measures to maintain and improve them, such as weeding, pine weevil control and promenade construction.

Murata's efforts to protect ecosystems include preservation of Drosera spatulata, the spoonleaved sundew, which grows wild on the premises of the Yasu Plant. As another example, Murata's Head Office is growing Kirishima azalea (Rhododendron obtusum), which has been designated as protected plant species, at Nagaoka Tenmangu Shrine.



Drosera spatulata, the spoon-

Factories Rich in Greenery and in Harmony with Local Communities

To realize factories that are rich in greenery and in harmony with local communities, we are working on greening by cultivating mainly flowers and trees of each prefecture and municipality, as well as trees that are indigenous to the respective region. We hope to create green areas where people can enjoy flowers and fruits, as well seasonal changes by smelling the fragrances and viewing lush foliage or tinted autumnal leaves. These areas will also serve as habitats for wild birds and insects. We also grow many varieties in gardens that are open to public during blooming season, so that many people can enjoy viewing flowers and greenery.

Izumo Murata Manufacturing has its cherry and camellia trees on public view when they are in bloom. In April 2006, approximately 2,600 people visited Izumo Murata Manufacturing to view the cherry blossoms.



Cherry blossom viewing for the public Rhododendron viewing (Izumo Murata Manufacturing Co., Ltd.)



# **Environmental Communication**

Environmental Education for Elementary and Junior High School Children

Since fiscal 2005, at Murata's Head Office we have implemented environmental education programs for local elementary and junior high school children. During the program a lecture is given in quiz form, so that participating children can recognize the importance of the 3R (Reduce, Reuse and Recycle) of waste and the classification of waste. In fiscal 2005, the program was held six times.

We hope that the program will help the youngsters who will lead the next generation to learn about the significance of their role in establishing a recyclingbased society.

In fiscal 2006, we will organize this program in



other plants/offices in Japan as well, and implement other educational programs on such themes as energy saving and global warming.

Environmental education at elementary school

Communication with Local Communities As a member of the local community, Murata is a strong participant in regional activities. Many offices/plants and subsidiaries participate in activities to clean up their local communities, and in other environment-related events.

Examples of participation in regional activities:

- Participated in the Alps Hana-kaido Project (Azumi Murata Manufacturing Co., Ltd.)
- Exhibited at the Tannan Sangyo Fair (Fukui Murata Manufacturing Co., Ltd., Sabae Murata Manufacturing Co., Ltd.)
- Activities to clean facilities of special elderly nursing homes (Yasu Plant)
- Exhibited at the Kyoto Environmental Festival (Head Office)
- Exhibited at Eco Festa Okayama (Okayama Murata Manufacturing Co., Ltd.)



Cleaning activities (Yokohama Technical Center)



Participated in the Sabae City Environmental Seminar (Sabae Murata Manufacturing Co., Ltd.)

### Activities to Support NPOs

Murata provides support and cooperation to NPOs that vigorously implement environmental activities. In fiscal 2005 we offered assistance to Kankyo Shimin(CEF) by bearing the expense of printing the eco-lifestyle handbook "Daisuki Kyoto: Kankyo Shimin-no Asobikata Kurashikata," in support of the CEF's environmental activities.



Information Dissemination via Website Murata has a CSR section on the Company website, to promote information disclosure. We also detail our environmental activities on the website, as part of our efforts toward active information disclosure.

Until fiscal 2004 we posted environmental data on each plant; however, beginning in fiscal 2005 we publish CSR reports by site, which include various activities implemented by each business site. Among the data newly covered are each site's environmental targets, set in line with the ISO 14001 standards, and the progress that the site has achieved, its environmental measures and social philanthropy.



"Corporate Social Responsibility" section of Murata's website

# Third-Party Evaluation of Murata's Environmental Activities

Murata's Head Office was awarded a commendation of the Top Runner Program implemented by Kyoto Prefecture (June 2005) and the Kinki New Office Encouraging Prize (jury's special award), for its environmentally friendly building construction (September 2005).

Murata's Head Office was awarded the "Eco Kyoto 21" certification (recognizing business establishments that protect and foster Kyoto and its environment) in the "eco-style" category, for its eco-friendly activities (December 2005)

Anamizu Electronics Industries Co., Ltd. received the 2005 Ishikawa Governor's Award for Green Enterprise, for its active environmental management (February 2006)

Izumo Murata Manufacturing Co., Ltd. was awarded the Chugoku Bureau of Economy, Trade and Industry Director's Prize for its energy-saving efforts (February 2006)

Okayama Murata Manufacturing Co., Ltd. received the Chugoku Bureau of Economy, Trade and Industry Director's Prize for its energy-saving efforts (February 2006)

Kanazawa Murata Manufacturing Co., Ltd. was awarded the 2006 Excellence Prize by the Energy Conservation Center, as one of the Successful Cases of Energy Conservation in Factory & Building, for its energy-saving efforts. (February 2006)

# Third-party Comments

Please note that the comments of the author should not be construed as verifying the accuracy of this report.



Professor, Graduate School of Business Administration.

Katsuhiko Kokubu

# After Reading the CSR Report 2006 of the Murata Group

The Murata Group's CSR Report centers on three aspects: Economic Review, Environmental Review and Social Review. This configuration is appropriate for management in pursuit of triple bottom lines.

### Regarding Economic Review

Murata discloses its "Economic Relations with Stakeholders" as part of its economic information. This idea is indeed appropriate. Regrettably, however, the section regarding employees presents only the number of employees, and discloses no data on economic distribution. Even among Japanese enterprises, there is an increasing trend toward disclosure of added value distribution statements. I therefore hope that in the future Murata will clarify its ideal state of economic relationships as part of its social responsibility, and embody the ideal as part of the Company's management.

### Regarding Environmental Review

With regard to environmental activities, Murata has achieved most of its targets for fiscal 2005. For targets not yet attained, a tendency toward improvement has been indicated. I can therefore rate Murata's environmental management as making steady progress. As stated in the message from the President, now that the Head Office has obtained ISO 14001 certification. Murata has established groupwide environmental management, raising our expectations for further advancement. I also highly rate the fact that Murata has introduced

LCA even at the stage of product development /design, and has voluntarily established hazardous substance eliminating criteria more stringent than those of the RoHS Directive, and has made efforts to meet those criteria.

The Company provides detailed reports in individual fields of environmental measures. However, if a unified reporting form were used, I believe that the Company could send a clearer message. To be more specific, concrete progress achieved in environmental management can be disseminated by clarifying the targets and results for the current fiscal year and targets for the next fiscal year in each relevant section. I recommend that Murata consider better coordination between the CSR Report and the separate data book (Performance Data). In my opinion, important information such as medium- and long-term environmental plans should be explained in the CSR Report.

Priority challenges for Murata in the future will be enrichment of respective site data and overseas information. I am certain that enriching site data, while expanding the scope of environmental reports, will lead to strengthened environmental management across the Murata Group.

### Regarding Social Review

Concerning the Company's social activity, its attitudes toward wide disclosure of information make a favorable impression. However, Murata's social activity report has not yet reached the same level as its environmental report, which establishes specific targets that guide the Company's environmental efforts. This point is a future task to be addressed by the Company.

The top priority of CSR activities is to identify what social issues are indispensable for a company. To this end, the company must establish a mechanism for soliciting the opinions of stakeholders. I also believe that the company should make efforts to cope with the identified social issues, by establishing certain indicators for those issues. Such efforts will help strengthen the corporate management capability.

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**Environmental Management Department** (regarding environmental activities)

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E-mail address for inquiries about this CSR Report env@murata.co.jp

This CSR Report is also available on our website. http://www.murata.co.jp/csr/index.html

# muRata Manufacturing Co., Ltd.

# CSR Report 2006

# Performance Data

# Murata Group

Economic Performance
History of Environmental Preservation Activities
Objectives and Targets
Environmental Management
Environmental Performance
Social Management
Social Performance

Comparison with GRI Guidelines

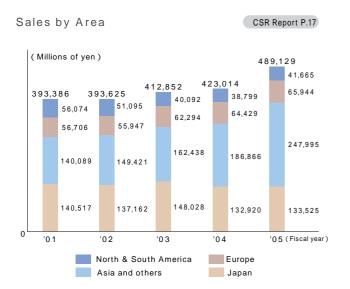


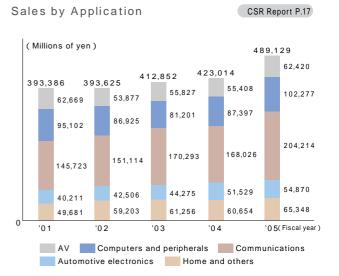
### Financial Data

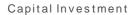
CSR Report P.17-18

	FY2001	FY2002	FY2003	FY2004	FY2005
Net Sales (Millions of yen)	394,775	394,955	414,247	424,468	490,784
Operating Income (Millions of yen)	51,001	59,187	74,210	69,515	89,839
Income before Income Taxes (Millions of yen)	52,408	59,094	78,685	72,905	91,680
Net Income (Millions of yen)	34,999	39,467	48,540	46,578	58,448
Total Assets (Millions of yen)	839,372	834,313	844,115	850,748	909,641
Shareholders' Equity (Millions of yen)	726,236	692,090	700,937	712,309	755,394
Shareholders' Equity Ratio (%)	86.5	83.0	83.0	83.7	83.0
Return on Equity (ROE) (%)	4.9	5.6	7.0	6.6	8.0
Shareholders' Equity per Share (Yen)	2,973.22	2,939.41	3,052.25	3,169.82	3,404.09

<sup>\*</sup> Amounts presented on the consolidated statement are rounded off to the nearest million yen.



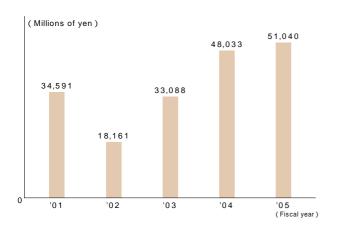


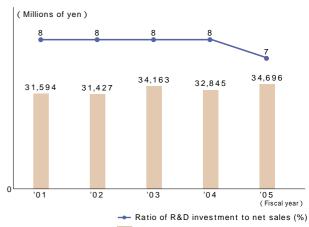












R&D investment

# History of Environmental Preservation Activities

Year	Events
1989	Adopted voluntary policy to eliminate ozone-depleting substances (designated CFCs and 1,1,1-trichloroethane)
	Initiated project to eliminate ozone-depleting substances
1991	Initiated survey of soil and groundwater contamination
1993	Achieved elimination of ozone-depleting substances (1,1,1-trichloroethane and designated CFCs)
	Adopted voluntary policy to eliminate chlorine-based organic solvents (trichloroethylene, tetrachloroethylene and dichloromethane)
1994	Established Murata Environment Committee
1995	Adopted the Murata Environmental Charter (First Environmental Action Plan)
	Established the Environmental Management Department in the Head Office
	Launched Lead-free Solder Project
	Achieved elimination of chlorine-based organic solvents (trichloroethylene and tetrachloroethylene) and hydrochlorofluorocarbons (HCFCs)
1996	Adopted voluntary regulation program to reduce environmentally hazardous substances contained in products
1997	Acquired ISO 14001 certification at Taiwan Murata Electronics Co., Ltd. for the first time in the Murata Group
	Adopted voluntary regulation program to reduce emissions of environmentally hazardous chemical substances from manufacturing processes
	Introduced in-house courses for training internal environmental auditors
1998	Discontinued use of chlorine-based organic solvent (trichloroethylene), thereby achieving the objective of the voluntary policy adopted in 1993
	Achieved recycling of all discarded paper in Japan, enabling discontinuation of waste incinerators
	Published a special feature on Environment Month in the Company journal
1999	Adopted life cycle assessment (LCA) guidelines
	Began operating a cogeneration system at Yasu Plant
	Established soil pollution control standards, and commenced upgrading of existing equipment
	Introduced a chemical substance inspection and registration system
2000	Acquired ISO 14001 certification for all production bases inside and outside Japan
2001	Introduced a composting system for raw food wastes from Company dining facilities in Japan
	Revised the Murata Environmental Charter (Second Environmental Action Plan)
	Issued the Green Procurement Guide and commenced implementing the green procurement policy
2002	Upgraded existing equipment in Japan to meet soil pollution control standards
	Issued Inaugural Environmental Report
2003	Introduced product assessment system
	Introduced environmental cost management (environmental accounting) system
2004	Achieved zero-emissions objective in Japan
	Revised the Murata Environmental Charter (Third Environmental Action Plan)
	Completed the new head office designed in keeping with the eco-friendly office building concept
	Achieved zero-emissions objective in constructing the new head office building
2005	Commenced environmental education programs for elementary and junior high school children
	Obtained ISO 14001 certification for Murata's Head Office, Tokyo Branch and sales branches (all Japanese sites have now obtained certification)

# 3rd Environmental Action Plan

Theme	Item	Targets for Fiscal 2010
Environmental management	Enhancing environmental management system	Establish the identity and concept of environmental management, and provide environmental management by extending group-wide cooperation in Japan and abroad.  Obtain ISO 14001 multi-site certification on a global basis.
Supplying environmentally	Environmentally conscious designs	Compile a life cycle assessment (LCA) database for each product. Establish the environmental impact of each product with actual numerical values and devise a system for setting out business policies with an environmental perspective.
conscious products	Reducing use of environmentally hazardous substances contained in products	Actively promote the adoption of alternative materials or conversion to alternative technologies.  Promote and strengthen the reduction and elimination of environmentally hazardous inorganic substances.  Eliminate the use of polyvinyl chloride.
	Managing information related to environmentally hazardous substances	Strengthen tie-ups with e-businesses.
	Reducing use of packaging materials and conserving energy consumed in distribution	Reduce the amount of packaging materials used per unit of net production in Japan by more than 30% compared to FY 2000 levels. Reduce CO <sub>2</sub> emissions from physical distribution per unit of net production in Japan by more than 30% compared to FY2000 levels.
	Green procurement	Continue to investigate the green value of materials in order to comply with laws and regulations of Japan and other countries, so as to maintain a 100% green procurement ratio for materials used in production.
Eco-friendly	Global warming prevention	Reduce $CO_2$ emissions per unit of net production in Japan by more than 25% compared to FY 1990 levels.
business operations	Resource conservation and waste reduction, reuse and recycling	Reduce the waste generated per unit of net production in Japan by more than 55% compared to FY 2000 levels. Achieve a material recycling rate as close to 100% as possible.  Reduce water consumption per unit of net production in Japan by more than 55% compared to FY 2000 levels.
	Managing and reducing environmentally hazardous substances used in production processes	Reduce the atmospheric release of volatile organic compounds (VOCs), (which generate photochemical oxidant and suspended particulate matter (SPM)) by more than 30% compared to FY 2000 levels. Reduce the atmospheric release of perfluorocompounds (PFCs), which are green house gases, by more than 80% compared to FY 2002 levels.
	Risk management	Remain committed to limiting environmental risks to the greatest extent possible, learning from the past as continuing with the remediation of contaminated soil and groundwater.
Social	Environmental communication	Continue to promote information disclosure and undertake business management in close contact with the local communities and societies in which Murata Group companies are located.
activities	Community/social activities	Continue to contribute to the community and society, provide greenery around plants and offices, and undertake business management in close contact with the local communities and societies in which Murata Group companies are located.

Theme	Item	Targets for Fiscal 2006
Environmental management	Enhancing environmental management system	Obtain ISO 14001 multi-site certification for the entire Murata Group in Japan.  Establish internal management techniques for cost-effective environmental management and provide our subsidiaries outside Japan with an environmental cost management system.
Supplying environmentally conscious products	Environmentally conscious designs	Extend product assessments throughout the Company. Devise an arrangement by which we will address environmental conservation when formulating research and development themes. Compile a database in order to increase the efficiency of LCA data calculations.
	Reducing use of environmentally hazardous substances contained in products	Actively promote the adoption of alternative materials or conversion to alternative technologies.  Complete the elimination of substances subject to the RoHS (European Union "Restriction of Hazardous Substances") Directive.  Curtail the amount of halogenated flame retardants in use by 20% compared to FY 2003 levels.
	Managing information related to environmentally hazardous substances	Compile and adopt a chemical substance management database. FY 2004: Compilation of a database for finished products FY 2005: Compilation and sharing of a database on materials for the purchasing department
	Reducing use of packaging materials and conserving energy consumed in distribution	Reduce the amount of packaging materials used per unit of net production in Japan by more than 20% compared to FY2000 levels. Reduce CO <sub>2</sub> emissions from physical distribution per unit of net production in Japan by more than 20% compared to FY 2000 levels.
	Green procurement	Promote abroad the domestic system for surveying the green value of materials, so as to establish green procurement practices in overseas subsidiaries.  Improve the green purchase ratio for office supplies to nearly 100%, in offices/plants and subsidiaries in Japan. (Make public our track record of green purchase.)
Eco-friendly	Global warming prevention	Reduce CO <sub>2</sub> emissions per unit of net production in Japan by more than 23% compared to FY 1990 levels.
business operations	Resource conservation and waste reduction, reuse and recycling	Reduce total waste emissions per unit of net production in Japan by more than 35% compared to FY 2000 levels. Achieve a material recycling rate in Japan of 100%.  Reduce water consumption per unit of net production in Japan by more than 35% compared to FY 2000 levels. Achieve zero emissions in construction of new buildings in Japan.  Promote zero emissions in construction of new buildings outside Japan.
	Managing and reducing environmentally hazardous substances used in production processes	Reduce atmospheric emissions of VOCs, which contribute to the generation of photochemical oxidants, and suspended particulates by more than 3% compared to FY 2000 levels.  Reduce atmospheric emissions in Japan of PFCs, which contribute to greenhouse gasses, by more than 50% compared to FY 2002 levels.
	Risk management	Undertake environmental remediation of contaminated soil and groundwater as a countermeasure to address the current method, which requires much time to achieve complete remediation at plants and subsidiaries where soil and groundwater contamination have been confirmed. This will reduce the remediation period by more than 50%.
Social activities	Environmental communication	Continue to issue CSR report and will release additional information more than two times a year via other media. Issue CSR reports on each site.
	Community/social activities	At each plant and subsidiary, implement environmental education programs for elementary and junior high school children, participate in environmental fairs and other events, conduct activities to clean up the surrounding region, and provide support for NGOs/NPOs. Expand our offices' rooftop greenery areas to more than 10% of each rooftop area.

# Sites with ISO 14001

Certification (In registration order) CSR Report P.21

, 0	,
Site	Registration Date
Taiwan Murata Electronics Co., Ltd. (Taiwan)	1997.09.30
Murata Electronics Singapore (Pte.) Ltd.	1997.12.05
Kanazawa Murata Manufacturing Co., Ltd. (incl. Nishikanazawa Plant)	1997.12.22
Murata Electronics (Thailand), Ltd.	1998.10.05
Yokaichi Plant	1998.11.25
Fukui Murata Manufacturing Co., Ltd. (incl. Miyazaki Plant and Shirayama Warehouse)	1998.12.25
Izumo Murata Manufacturing Co., Ltd.	1998.12.25
Toyama Murata Manufacturing Co., Ltd.	1998.12.25
Komatsu Murata Manufacturing Co., Ltd.	1999.02.23
Murata Electronics (Malaysia) Sdn. Bhd.	1999.08.06
Beijing Murata Electronics Co., Ltd. (China)	1999.09.23
Okayama Murata Manufacturing Co., Ltd.	1999.10.27
Tome Murata Manufacturing Co., Ltd.	1999.11.20
Kanazu Murata Manufacturing Co., Ltd. (incl. Natsume Plant)	1999.11.27
Azumi Murata Manufacturing Co., Ltd.	1999.12.01
Himi Murata Manufacturing Co., Ltd.	1999.12.01
Hakui Murata Manufacturing Co., Ltd.	1999.12.02
Iwami Murata Manufacturing Co., Ltd.	1999.12.02
Sabae Murata Manufacturing Co., Ltd.	1999.12.05
Yasu Plant	1999.12.27
Wakura Murata Manufacturing Co., Ltd.	1999.12.27
Anamizu Electronics Industries, Ltd.	1999.12.28
Wuxi Murata Electronics Co., Ltd. (China)	2000.01.21
Suzhou Murata Electronics Co., Ltd. (China)	2004.06.07
Yokohama Technical Center	2005.03.24
Murata Amazonia Industria E Comercio Ltda. (Brazil)	2005.05.10
Ogaki Murata Manufacturing Co., Ltd.	2005.07.04
Hong Kong Murata Electronics Co., Ltd. Murata Electronics Plant, Nanling, Buji, Longgang Dist., Shenzhen (China)	2005.09.19
Head Office, Tokyo Branch and sales branches of Murata Manufacturing Co., Ltd.	2006.03.20

# **Environmental Training**

Environmental Education and Training

CSR Report P.22

Elivironinicital Education and Training					
	Туре	Content			
Level-based training	Training for newly hired employees	Lectures for newly hired employees on general knowledge regarding environmental issues and environmental protection			
	Training for rank-and-file employees	Lectures on matters regarding the plant environmental management system, which should be widely known to employees			
	Training for managers	Lectures on items that managers should understand, in addition to the above things			
Function- based training	Training for internal environmental auditors	Specialized training course to develop qualified personnel as internal environmental auditors in our plants			
	Specialized training	Training conducted by each plant to keep everyone informed about in-house systems concerning management of environmentally hazardous substances, such as chemical substance-related training and training on wastes			
	Emergency simulation drills	Practical training conducted as if an emergency has just occurred in a plant			

Qualification name	Persons qualified	Persons obtaining qualification in FY2005
Pollution Control Manager (Air)	57	1
Pollution Control Manager (Water quality)	116	0
Pollution Control Manager (Noise)	17	0
Pollution Control Manager (Vibration)	10	0
Pollution Control Manager (Dust)	5	0
Pollution Control Manager (Dioxins)	3	0
Senior Pollution Control Manager	5	0
Energy Manager (Heat)	40	6
Energy Manager (Electricity)	39	2
Qualified Person for Energy Management (Heat)	4	1
Qualified Person for Energy Management (Electricity)	12	0
Manager of Industrial Waste Subject to Special Controls	114	5
Environmental Management System Provisional Auditor	19	5
Internal Environmental Auditor (in-house qualification)	765	66

# **Environmental Cost Management**

# Environmental Preservation Costs (Investment vs. Effects)

During fiscal 2005, Murata invested a total of approximately ¥1,610 million in environmental conservation, with an estimated economic benefit from such investment of about ¥2,350 million.

For global environmental conservation, we aggressively invested in introduction of cogeneration systems and turbo freezers. As a result, the estimated reduction of greenhouse gas emissions is about 203,344 metric tons of CO2.

For recycling, we aggressively invested in such measures as modification of waste liquid treatment equipment to reduce waste liquid volume, and introduction of cooling water circulating systems for vacuum pumps. As a result, the estimated waste reduction and water conservation totals some 22,063 metric tons and 604,662 m<sup>3</sup>, respectively.

### Environmental Preservation Costs (Investment vs. Effects)

CSR Report P.22

Cla	ssification	Investment (Millions of yen)	Economic effects (Millions of yen)	Physical effects	
	Pollutant control	239	-		
	Global environmental conservation	1,178	1,835	Reduction in greenhouse gas emissions (CO <sub>2</sub> equivalent)	203,344 [t-CO <sub>2</sub> ]
Costs for				Resource conservation	394 [t]
plant and	De suelle e	190	514	Water conservation	604,662 [m³]
office areas	Recycling	190	514	Waste reduction	22,063 [t]
				-	-
	Subtotal	1,607	2,349	-	
	tream/downstream tal conservation	0	0	-	-
Cost of mar	nagement	0	0	-	-
Cost of soc	ial activities	1	0	-	-
Cost of R&I	)	129	-	-	-
Cost of envi	ironmental damage	0	0	-	-
Tot	al	1,737	2,349		

- (1) The scope of accounting includes plants and offices of Murata Manufacturing and 17 subsidiaries in Japan.
- (2) The accounting term is the 12-month period from April 1, 2005 to March 31, 2006.
- (3) Effects include the materials and costs that are reduced over the five-year period as a result of the investments.
- (4) Proportional accounting is carried out for compounded costs in which the cost of environmental conservation is embedded in other costs.
- (5) Presumptive effects, such as the avoidance of potential risk, are not calculated.
- (6) For the fuel and electric power conversion coefficients for CO2 emissions, we used the figures in the Report on the Survey of Carbon Dioxide Emissions (1992), Environment Agency.
- (7) Physical effects are calculated as the effective difference between implementation and non-implementation of the countermeasures.
- (8) R&D cost is the total of expenses entailed in research and development intended primarily for environmental considerations.

# Environmental Preservation Costs (Costs vs. Effects)

During fiscal 2005, the costs involved in environmental conservation totaled approximately ¥2,150 million; the resulting economic effects are estimated to total some ¥770 million.

For global environmental conservation, we actively implemented such measures as energy-saving in clean rooms, and improved furnace charge rates. As a result, we achieved greenhouse gas emissions reduction of 18,665 metric tons.

For recycling, we actively implemented measures to convert toluene into valuable materials and reduce pumped groundwater consumption by reusing groundwater. As a result, we achieved waste reduction of 7,401 metric tons and water conservation of 686,611 m<sup>3</sup>.

### Environmental Preservation Costs (Costs vs. Effects)

CSR Report P.22

Cla	ssification	Amount invested (Millions of yen)	Economic effects (Millions of yen)	Physical effects	
Pollutant control		464	_	Number of cases where regulated values are not satisfied	0 [none]
		404	-	Reduction in chemical substances emitted	189 [t]
	Global environmental conservation	364	259	Reduction in greenhouse gas emissions (CO <sub>2</sub> equivalent)	18,665 [t-CO <sub>2</sub> ]
Costs for plant and				Resource conservation	211 [t]
office areas	Recycling	1,326	514	Water conservation	686,611 [m³]
		,,020		Waste reduction	7,401 [t]
				Increased recycling	101 [t]
	Subtotal	2,154	773		
	tream/downstream tal conservation	149	17	-	23 [t]
Cost of man	agement	429	-	-	-
Cost of soc	ial activities	164	-	-	-
Cost of R&E	)	1,468	-	-	-
Cost of environmental damage		0	-	-	-
Tot	al	4,364	790		

- (1) The scope of accounting includes plants and offices of Murata Manufacturing and 17 subsidiaries in Japan.
- (2) The accounting term is the 12-month period from April 1, 2005 to March 31, 2006.
- (3) Costs include labor and depreciation.
- (4) Proportional accounting is carried out for compounded costs in which the cost of environmental conservation is embedded in other costs.
- (5) Presumptive effects, such as the avoidance of potential risk, are not calculated.
- (6) For the fuel and electric power conversion coefficients for CO2 emissions, we used the figures in the Report on the Survey of Carbon Dioxide Emissions (1992), Environment Agency,
- (7) Physical effects are calculated as the effective difference between implementation and non-implementation of the countermeasures.
- (8) R&D cost is the total of expenses entailed in research and development intended primarily for environmental considerations.

Reduction of CO<sub>2</sub> Emissions (in Japan) CSR Report P.28

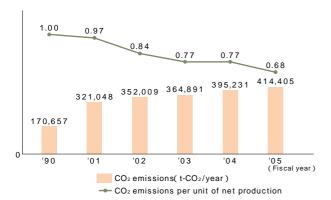
Total emissions Value in FY2005: 414,405t-CO2

5% increase compared to the previous fiscal year; 143% increase compared to fiscal 1990 levels

CO2 emissions per unit of net production (base year: FY1990)

Value in FY2005: 0.68 12% decrease compared to the previous fiscal year; 32% decrease compared to fiscal 1990 levels

### CO<sub>2</sub> Emissions (in Japan)



CO<sub>2</sub> Emissions by Area

CSR Report P.28

Breakdown

Japan: 86.4%, East Asia: 3.3%, Southeast Asia: 10.1%, Europe and others: 0.2%

Total emissions

Value in FY2005: 479,514 t-CO2

5% increase compared to the previous fiscal year

### Reduction of CO<sub>2</sub> Emissions from Distribution (in Japan)

CSR Report P.33

Total emissions

Value in FY2005: 4,056 t- CO2

3% increase compared to the previous fiscal year; 6% decrease compared to fiscal 2000 levels

CO2 emissions per unit of net production

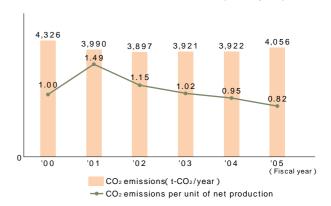
(base year: FY2000)

FY2005 value: 0.82

14% decrease compared to the previous fiscal year;

18% decrease compared to fiscal 2000 levels

#### CO<sub>2</sub> Emissions from Distribution (in Japan)



Reduction of CO<sub>2</sub> Emissions in Offices CSR Report P.34

Breakdown

Head Office: 62.6%, sales branches in Japan: 1.5%,

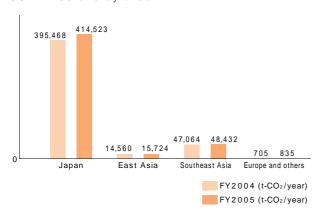
overseas sales subsidiaries: 35.9%

Total emissions

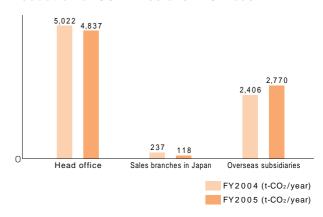
Value in FY2005: 7,725 t-CO2

1% increase compared to the previous fiscal year

### CO<sub>2</sub> Emissions by area



### Reduction of CO<sub>2</sub> Emissions in Offices



Reduction in Waste Generation (in Japan) CSR Report P.29

Total generation

Value in FY2005: 28,075 t

7% decrease compared to the previous fiscal year; 20% decrease compared to fiscal 2000 levels

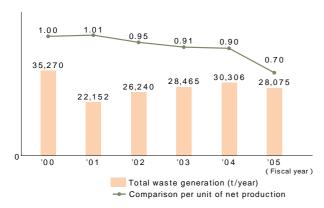
Waste generation per unit of net production (base year: FY2000)

Value in FY2005: 0.70

23% decrease compared to the previous fiscal year;

30% decrease compared to fiscal 2000 levels

#### Waste Generation (in Japan)

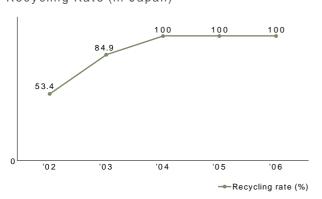


### Recycling Rate (in Japan)

CSR Report P.29

At the end of March 2004, Murata achieved its zero emissions targets (defined as a 100% recycling rate and zero landfilling) at its plants and subsidiaries in Japan. Since then, these plants and subsidiaries have maintained 100% recycling rate.

# Recycling Rate (in Japan)



### Amount of Packaging Materials Used (in Japan)

CSR Report P.33

Total amount of packing materials used Value in FY2005: 5,400 t

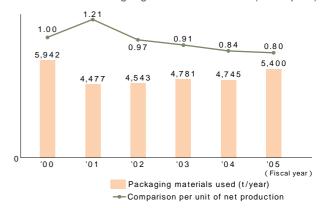
14% increase compared to the previous fiscal year; 9% decrease compared to fiscal 2000 levels

Packing materials used per unit of net production (base year: FY2000)

Value in FY2005: 0.80

5% decrease compared to the previous fiscal year; 20% decrease compared to fiscal 2000 levels

### Amount of Packaging Materials Used (in Japan)



### Water Consumption (in Japan)

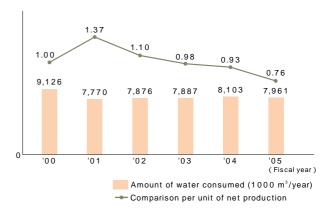
CSR Report P.30

Total amount of water consumed Value in FY2005: 7.961 million m<sup>3</sup> 2% decrease compared to the previous fiscal year; 13% decrease compared to fiscal 2000 levels

Water consumption per unit of net production (base year: FY2000) Value in FY2005: 0.76

18% decrease compared to the previous fiscal year; 24% decrease compared to fiscal 2000 levels

### Water Consumption (in Japan)



Voluntary Regulation Program for Environmentally Hazardous Substances in Products

CSR Report P.26

Rank		Substances				
Substances	Inclusion of these substances in products prohibited.	Asbestos Cadmium and its compounds Hexavalent chromium compounds Mercury and its compounds Lead and its compounds (copper alloy content, aluminum with more than 0.4 PBDEs Beryllium and its compounds Pentachlorophenol (PCP) Polychlorinated biphenyls (PCBs) Organophosphorus compounds		Short-chained chlorinated paraffin Metallic nickel Acrylonitrile Thallium and its compounds I materials with more than 0.35% lead PBBs Arsenic and its compounds (excl. semiconductors) Benzene Polychlorinated naphthalene (with 3 or more chlorine atoms) Organotin compounds Red phosphorus and red-phosphorus fire retardant		
Substances to be reduced	Reduced content of these substances in products planned	Lead and its compounds (used in some ceramics, solders, etc.) Polyvinyl chloride (PVC) and its blends Cobalt chloride in packaging materials				
Substances in preparation for reduction	Content of these substances in products controlled, and voluntarily prepared for reduction	Chlorinated paraffin Xylene Selenium and its compounds Lead and its compounds (used in Arsenic and its compounds (applic Beryllium and its compounds (use	cation limited to semiconductors)	Ethylene glycolethers and its acetates Bromine-based flame retardants Toluene  Organic cyanogen compounds Foam polystyrene for packaging materials		

Voluntary Regulation Program for Environmentally Hazardous Substances Used or Emitted in Production Processes CSR Report P.30

Rank			Substances	
Prohibited	Any application prohibited	Metallic nickel Dioxins White lead Trichloroethylene Halon Benzene CFCs HCFCs Acrylonitrile Mercury and its compounds Arsenic and its compounds (excl. semiconductors) Organic lead Hexavalent chromium compounds Organotin compounds Organophosphorus compounds Pentachlorophenol (PCP) Polychlorinated terpheny Polychlorinated naphthalene Polychlorinated biphenyls (PCBs) 1,1,1-Trichloroethane (with 3 or more chlorine atoms) Chlordanes Toxaphene Endrin Lindane Carbon tetrachloride Heptachlor HBFCs Red phosphorus and red Methyl bromide fire retardant Lead and its compounds (copper alloy with more than 4% lead content, steel materials with more tha		Benzene Acrylonitrile xcl. semiconductors) Organotin compounds Polychlorinated terphenyls (PCTs) 1,1,1-Trichloroethane Toxaphene Carbon tetrachloride Red phosphorus and red-phosphorus fire retardant
Reduce emissions	Reduced emissions planned	Acetaldehyde Formaldehyde Lead and its compounds (used i Toluene 2,4,5-T	Chloroform Nickel sulfate n some ceramics, solders Xylene Ethanol	Cyanide compounds , etc.) PFC n-Heptane
Prepare to reduce emissions	Emissions controlled and voluntarily prepared for reduction	Zinc and its compounds Nickel powder Lead and its compounds (used in source and its compounds (application propylene glycol monomethyl ether isobutanol 1-octanol Cyclopentanone Styrene 2-heptanone	tion limited to semiconductors	etc.) s) Ethylene glycol monobutyl ether

Pollutants Released and Transferred Subject to the PRTR Law (Total for Japan)

CSR Report P.30 (Unit: t/year)

	nts Released and Transferred St		Released				Transferred		
Gov't No.	Substance	Amount handled	To atmosphere	To public bodies of water	To soil	Landfilled	To sewerage	To waste	To recycling
16	Monoethanolamine	10.9	0.0	0.0	0.0	0.0	0.0	0.0	10.6
25	Antimony and its compounds	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
30	Bisphenol A liquid epoxy resin	32.9	0.0	0.0	0.0	0.0	0.0	0.0	2.7
40	Ethyl benzene	4.9	0.8	0.0	0.0	0.0	0.0	0.0	1.1
45	Ethylene glycol monomethyl ether	17.1	0.0	0.0	0.0	0.0	0.0	0.0	11.9
58	1-octanol	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
63	Xylene	88.8	3.0	0.0	0.0	0.0	0.0	0.0	55.7
64	Silver and its water-soluble compounds	117.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
68	Chromium and trivalent chromium compounds	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5
100	Cobalt and its compounds	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
177	Styrene	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.2
202	Tetrahydroxymethyl anhydrous phthalic acid	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Water-soluble copper salts (excl. complex salts)	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
227	Toluene	3206.2	30.7	0.0	0.0	0.0	0.0	0.0	271.7
230	Lead and its compounds	737.5	0.0	0.1	0.0	0.0	0.0	0.0	101.7
231	Nickel	613.8	0.0	0.0	0.0	0.0	0.0	0.0	64.7
232	Nickel compounds	215.3	0.0	0.0	0.0	0.0	0.0	0.0	40.9
253	Hydrazine	464.4	0.0	0.0	0.0	0.0	0.0	0.0	165.3
270	Di-n-butyl phthalane	12.0	0.1	0.0	0.0	0.0	0.0	0.0	4.7
272	Bis-2-ethylhexyl phthalate	62.8	0.0	0.0	0.0	0.0	0.0	0.0	23.9
300	1,2,4-Benzenetricarboxylic anhydride	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
304	Boron and its compounds	19.9	0.0	0.0	0.0	0.0	0.0	0.0	16.4
310	Formaldehyde	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
311	Manganese and its compounds	30.2	0.0	0.0	0.0	0.0	0.0	0.0	3.6

<sup>\*</sup> As for the amount of substances transferred to waste, all waste has been recycled since fiscal 2004, since we achieved zero emissions targets in fiscal 2003.

Atmospheric Release of Major Substances Subject to PRTR

(toluene and xylene)

CSR Report P.30 (Unit: t)

, ,				( 01111: 1 )
Substance	FY2000	FY2003	FY2004	FY2005
Toluene	67.4	25.3	26.4	30.7
Xylene	6.4	4.7	3.6	3.0

### State of Groundwater Remediation

CSR Report P.32 (Unit:mg/l)

Substance (Environment Standard		ethylene smax.)	Cis-1,2-dichloroethylene ( 0.04max. )		Remarks
Plants and Value) Subsidiaries	FY2004	FY2005	FY2004	FY2005	
Murata Manufacturing Co., Ltd., Nagaoka Plant	0.027	0.027	N.D.	0.013	
Fukui Murata Manufacturing Co., Ltd., Takefu Plant	0.010	0.010	-	-	In preparation for completion of remediation
Fukui Murata Manufacturing Co., Ltd., Shirayama Site	1.241	1.224	0.390	0.286	
Fukui Murata Manufacturing Co., Ltd., Miyazaki Plant	0.810	1.071	0.151	0.173	
Asuwa Electronics Industries, Ltd.	0.130	N.D.	1.298	0.024	
Iwami Murata Manufacturing Co., Ltd.	0.223	0.306	1.194	1.237	
Wakura Murata Manufacturing Co., Ltd.	N.D.	N.D.	-	-	In preparation for completion of remediation
Himi Murata Manufacturing Co., Ltd.	N.D.	N.D.	N.D.	N.D.	
Kanazu Murata Manufacturing Co., Ltd.	N.D.	N.D.	-	-	Cleanup completed
Kanazu Murata Manufacturing Co., Ltd., Natsume Plant	0.112	0.080	0.162	0.136	
Hakui Murata Manufacturing Co., Ltd.	N.D.	N.D.	0.105	0.017	
Hakui Murata Manufacturing Co., Ltd., Togi Site	0.146	0.109	0.253	0.188	
Toyama Murata Manufacturing Co., Ltd.	N.D.	N.D.	-	-	Cleanup completed
Murata Electronics North America		ethylene 5 max.)	Cis-1,2-dich ( 0.07		
State College Operation	0.014	0.008	0.037	0.020	*

<sup>(1)</sup> Data are average values from April 2004 to March 2005 and from April 2005 to March 2006.

# Costs for Soil and Groundwater Remediation CSR Report P.32

(Unit: Millions of yen)

	Non-consolidated	Consolidated
Total until FY2005	1,077	7,600
Estimate for FY2006 and after*	571	3,556
Total	1,648	11,156

<sup>\*</sup> Note: Amount allocated as reserve credit is result of trial calculation of full cost of remediation measures, up to completion of contamination cleanup.

<sup>(2)</sup> Data show the average values for downstream groundwater in all wells drilled along the border of a site.

<sup>(3)</sup> We established the apprehended area in order to prevent migration of pollutants beyond the site, and are undertaking remediation efforts.

<sup>(4) &</sup>quot;N.D. (Not detectable)" means the measured quantity is below the lower limit of detection.
(5) "-" indicates that the site is deemed free from contamination.
\* Murata Electronics' North America State College Operation was sold to a company on December 30, 2005.

Responsibility for remediation measures was taken over by said company, following deliberations between the company and Murata. Accordingly, this document does not cover the report on the state of groundwater remediation in fiscal 2006, and onward will not in future.

# Sites with ISO 9001, QS 9000 or ISO/TS 16949 Certification

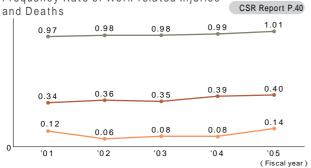
CSR Report P.35

Plant	Target Standard	Date Accredited
Asuwa Electronics Industries, Ltd.	ISO9001	1992.11.25
Komatsu Murata Manufacturing Co., Ltd.	ISO9001	1993.02.03
Wakura Murata Manufacturing Co., Ltd.	ISO9001	1993.04.28
	ISO9001	1993.12.01
Ogaki Murata Manufacturing Co., Ltd.	QS9000	2000.12.15
Murata Manufacturing Co., Ltd., Yasu Plant, Chemical Material Production Dept.	ISO9001	1995.06.19
Anamizu Electronics Industries, Ltd.	ISO9001	1995.07.28
Taylama Muyata Manufaatusina Ca. Ltd	ISO9001	1996.12.16
Toyama Murata Manufacturing Co., Ltd.	ISO/TS16949	2003.08.12
Fukui Murata Manufacturing Co., Ltd. (incl. Miyazaki Plant)	ISO9001	1997.04.02
Izumo Murata Manufacturing Co., Ltd.	ISO9001	1997.07.25
izumo muiata manufactuming co., Etu.	QS9000	1997.07.23
Sabae Murata Manufacturing Co., Ltd.	ISO9001	1997.08.14
-	ISO/TS16949	2004.08.02
Murata Manufacturing Co., Ltd., Yasu Plant, Components Division 3, Semiconductor Product Dept.	ISO9001	1997.10.21
Azumi Murata Manufacturing Co., Ltd.	ISO9001	1997.11.06
Azum wurata wandractum g oo., Etu.	QS9000	1337.11.00
Himi Murata Manufacturing Co., Ltd.	ISO9001	1997.12.01
Tillii Mulata Maliulactuling Oo., Ltu.	ISO/TS16949	2005.11.08
Murata Manufacturing Co., Ltd., Yokaichi Plant	ISO9001	1998.03.31
Mulata Manufacturing Co., Ltu., Tokalciii Frant	ISO/TS16949	2005.11.08
Kanazawa Murata Manufacturing Co., Ltd. (incl. Nishikanazawa Plant)	ISO9001	1998.04.16
Kanazawa Murata Manuraotuming Oo., Etd. (mor. Mishikanazawa Fianti)	ISO/TS16949	2006.02.14
Okayama Murata Manufacturing Co., Ltd.	ISO9001	1998.07.01
Okayama Wufata Wanufactumiy Oo., Etu.	QS9000	1330.07.01
Kanazu Murata Manufacturing Co., Ltd. (incl. Natsume Plant)	ISO9001	1998.07.01
Hakui Murata Manufacturing Co., Ltd.	ISO9001	1999.02.11
ratar marata manatating 50, 21a	ISO/TS16949	2005.11.08
Iwami Murata Electronics Co., Ltd.	ISO9001	1999.03.29
	QS9000	
Tome Murata Electronics Co., Ltd.	ISO9001	2002.06.10
·	QS9000	
Fukui Murata Manufacturing Co., Ltd. (incl. Miyazaki Plant)	ISO/TS16949	2003.09.25
Murata Electronics (UK) Ltd.	ISO9001	1992.10.27
Murata Electronics B.V. (Netherlands)	ISO9001	1992.12.01
	QS9000	
Murata Elektronik Handels GmbH (Germany)	ISO9001	1993.04.15
Murata Electronique SAS (France)	ISO9001	1993.04.15
Murata Elettronica S.p.A. (Italy)	ISO9001	1993.04.23
Murata Electronics Switzerland AG	ISO9001	1993.06.15
Murata Amazonia Industria E Comercio Ltda. (Brazil)	ISO9001	1998.07.28
Taiwan Murata Electronics Co., Ltd.	ISO9001	1993.11.26
Murata Electronics (Malaysia) Sdn. Bhd.	ISO9001	1997.02.28
Murata Electronics (Thailand), Ltd.	ISO9001	1998.03.17
Muyata Flactuation North America Inc. (Communication	ISO/TS16949	2005.02.17
Murata Electronics North America, Inc. (Smyrna)	ISO9001	1998.09.11
Beijing Murata Electronics Co., Ltd. (China)	ISO9001	1998.12.10
Wuxi Murata Electronics Co., Ltd. (China)	ISO9001	1999.05.12
	ISO/TS16949	2004.12.10
Murata Electronics Singapore (Pte.) Ltd.	ISO9001	1999.11.03
Suzhou Murata Electronice Co. Ltd. (China)	ISO/TS16949	2003.09.30
Suzhou Murata Electronics Co., Ltd. (China)	ISO9001	2003.08.02

### Ratio of Disabled Persons' Employment CSR Report P.37



# Frequency Rate of Work-related Injuries



- → Avg. for manufacturing industry\*
  → Avg. for election machinery and apparatus manufacturing industry\* -- Murata (in Japan)
  - ( \* Source: Ministry of Health, Labor and Welfare, Japan )

Employees who Were Re-employed

CSR Report P.38

			( Uni	t: Persons )
System name	FY2002	FY2003	FY2004	FY2005
Re-employment system	7	17	13	9

#### Employees who Took Childcare/family Care Leaves (Murata in Japan) CSR Report P.37 (Unit: Persons,%)

			( 0	0100110,70
System name	FY2002	FY2003	FY2004	FY2005
Family care leave	4	11	13	1 4
Leave after childbirth	197	203	171	197
Childcare leave (Figure in parentheses indicates the rate of leave-taking*)	191 (97%)	189 (93%)	162 (95%)	182 (92%)
Employees who left the Company due to childbirth	7	19	12	8

### Donations for Disaster Victims

CSR Report P.42

Month/Year	Description	Amount
September 2005	Monetary relief for victims of Hurricane Katrina*	¥7.62 million
November 2005	Monetary relief for victims of Northern Pakistan Earthquake	¥0.5 million

<sup>\*</sup> Breakdown of monetary relief for victims of Hurricane Katrina Murata Electronics North America Inc.: ¥3.98 million Donations by employees of Murata Electronics North America: ¥1.14 million

Murata Manufacturing Co., Ltd.: ¥2.50 million

# Level-based Training

# CSR Report P.39 Function-based Training

CSR Report P.39

	Name of training	Days or sessions	Course Trainings per year	Trainees	Classification	Courses	Trainees
	Collective training for new employees when they first join the Company	6	1	145	Technical training	63	1403
	Introductory training for new employees (engineers)	1	1	121	Quality control	42	2114
	Basic education on electric/electronic components for new employees (clerical staff)	2	1	35	Product safety	6	833
	Follow-up training for new general employees	1	1	40	Environment	2	2187
	Introduction to business-related laws and contracts	1	4	119	Production supervision	12	387
k-and-	Management simulation training	2	5	136	Equipment safety	64	1245
level	Training for employee hired midway through the year	2	1	23	Machinery measurement and design	2	248
	OJT instructor training	1	4	85	IE and VE	2	59
	Career design training for female employees	2	1	8	Information technology	27	722
	Mid-level employee training	2	6	183	Intellectual property	5	479
	Core leader training	2	9	220	Safety and sanitation	8	580
	Training through cross-industrial exchanges	3	4	42	Sales and marketing	11	250
	Newly appointed subsection chief training	2	7	160	Legal affairs and compliance	3	313
	Development and design management training	2	1	14	International operations	13	277
	Management review training	3	5	126	Personnel affairs	2	16
	Newly appointed admin staff training	4	1	87	Others	9	336
	Training on management of workplaces and staff members	2	2	57	•		•

# Other Training

CSR Report P.39

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Classification	Sessions per year	Trainees
Lectures by internal staff (awareness raising program for engineers, et al.)	19	760
Lectures by outside lecturers (on technical trends, marketing, etc.)	34	2464
Training on sexual harassment	1	305
Training on mental health	2	80

	Name of training	Days or sessions	Course Trainings per year	Trainees
	Collective training for new employees when they first join the Company	6	1	145
	Introductory training for new employees (engineers)	1	1	121
	Basic education on electric/electronic components for new employees (clerical staff)	2	1	35
	Follow-up training for new general employees	1	1	40
	Introduction to business-related laws and contracts	1	4	119
Rank-and-	Management simulation training	2	5	136
file level	Training for employee hired midway through the year	2	1	23
	OJT instructor training	1	4	85
	Career design training for female employees	2	1	8
	Mid-level employee training	2	6	183
	Core leader training	2	9	220
	Training through cross-industrial exchanges	3	4	42
	Newly appointed subsection chief training	2	7	160
	Development and design management training	2	1	14
	Management review training	3	5	126
	Newly appointed admin staff training	4	1	87
	Training on management of workplaces and staff members	2	2	57
Management	Training for tackling self-imposed challenges	2	23	528
level	Follow-up training for newly appointed admin staff	2	3	51
	Business framework training for managerial level	2	1	19
	Newly appointed manager training	2	1	14
	Training for persons in charge of merit rating	1	9	170
	Overseas local manager training	5	3	40
Outside dispatch	MOT graduate schools and business schools			17

# Comparison with GRI Guidelines

Guideline Indicator	CSR Report	PD
1 Vision and Strategy		
1.1 Statement of the organization's vision and strategy	P3-4	
1.2 Statement from the CEO (or equivalent senior manager)	P3-4	
2 Profile		
Organizational Profile		
2.1 Name of reporting organization	P5	
2.2 Major products and/or services	P5	
2.3 Operational structure of the organization	P5	
2.4 Description of major divisions, subsidiaries, etc.	P6	
2.5 Countries in which the organization's operations are located	P5	
2.6 Nature of ownership (legal form)	P5	
2.7 Nature of markets served	P5, P17	
2.8 Scale of the reporting organization	P5, P17	
2.9 List of stakeholders, key attributes of each, and relationship to the reporting organization	P16	
Report Scope		
2.10 Contact person(s) for the report	P46	
2.11 Reporting period	P1	
2.13 Boundaries of report	P1	
Report Profile		
2.18	P17-18, P22	P5-6
2.20	P1, P45	
2.22	P1	
3 Governance Structure and Manageme	ent Systems	
Structure and Governance		
3.1	P13	
3.4	P13	
3.6	P14, P21	
3.7	P14, P19	
Stakeholder Engagement		
3.9	P16	
Overarching Policies and Management	Systems	
3.13	P15, P26, P31	
3.16	P27, P36, P41	
3.19	P20	Р3
3.20	P21, P35	P4, P12
4 GRI Content Index		
4.1		P14

Guideline Indicator		CSR Report	PD
5 Performance Indicators			
Systemic indicators		P40	P12
Cross-cutting indicators		P28	P7
Economic Performance Ind	icators		
Customers	EC1	P5, P17	
	EC2	P17	
Public Sector	EC10	P18	P13
Environmental Performance	e Indicators		1
Materials	EN1	P23-24	
Energy	EN3	P23-24	
	EN17	P28, P11-12	
	EN19	P25, P33	
Water	EN5	P23-24	
Emissions,	EN8	P23-24, P28	P7
Effluents and Waste	EN10	P23-24	
Products and Services	EN14	P25-26	
Transport	EN34	P33	
Overall	EN35		P5-6, P11
Social Performance Indicat	ors		
Employment	LA1	P17	
	LA12	P37	P13
Health and Safety	LA5	P40	P13
Training and Education	LA9		P13
	LA16	P38, P39	
	LA17	P38, P39	
Diversity and Opportunity	LA10	P37	
Strategy and Management	HR1	P37	
Non-discrimination	HR4	P37	
Child Labor	HR6	P37	
Forced and Compulsory Labor	HR7	P37	
Disciplinary Practices	HR9	P14	
	HR10	P14	
Community	SO1	P42-44	
	SO4	P44	
Competition and Pricing	SO7	P41	
Respect for Privacy	PR3	P15	

The Global Reporting Initiative (GRI) was launched in 1997 as a joint initiative of the U.S. non-governmental organization Coalition for Environmentally Responsible Economies (CERES) and the United Nations Environment Programme (UNEP), with the goal of enhancing the quality, rigor, and utility of sustainability reporting. The GRI guidelines are a framework for reporting on an organization's sustainability performance, which can be applied worldwide, and created by opinions from a variety of stakeholders, including businesses, non-profit advocacy groups, accounting bodies, investor organizations, trade unions, and many more.

<sup>「</sup>Sustainability Reporting Guidelines 2002」 ► http://www.globalreporting.org/guidelines/2002/2002Japanese.pdf

# muRata Manufacturing Co., Ltd.