Changes for the Better
Purpose
This report is published for the purpose of communicating with stakeholders and fulfilling our responsibility of presenting to the public information on activities engaged in by the Mitsubishi Electric Group to help realize a sustainable society.

Editorial Policy
This annual publication primarily reports on significant initiatives, events and changes that occurred in fiscal 2006. Its goal is to present this information in a manner that is easy to understand. In reporting our activities, we tried to go beyond just presenting our principles and the results of activities to date in order to also touch on future policies and issues. We are guided in this effort by the "plan-do-check-act" approach.

Composition
The report consists of four main sections: Basic CSR Policies and Systems, Features, Environmental Responsibilities and Actions, and Responsibility and Conduct Toward Stakeholders.
• A new report on risk management has been added to the Basic CSR Policies and Systems section.
• The Features section presents our community and citizenship activities from three different starting points. Industrial Products highlights new technologies contributing to society, Home Appliances reports on activities engaged in under the new concept, "Uni & Eco," and Global Activities provides an overview of business development in Thailand.
• In the Environmental Responsibilities and Actions section, we continue on from last year and report on as many examples of our activities in this area as space permits.
• We worked to enhance the contents of the Responsibility and Conduct Toward Stakeholders section by dedicating a page to each type of stakeholder.

Report Coverage
Environmental Aspects
Mitsubishi Electric Corporation and 85 affiliates (62 in Japan, 23 overseas)
* A list of the companies can be found on our website.

Economic Aspects
Reporting is primarily for Mitsubishi Electric Corporation, consolidated subsidiaries, and affiliated companies to which the equity method is applied.
* Detailed financial information is disclosed in our 2006 annual report.

Social Aspects
Reporting focuses on Mitsubishi Electric Corporation.
* The range of data compiled is stated elsewhere.

Period Covered by the Report
April 1, 2005 to March 31, 2006
The period covered by the report is denoted as "fiscal 2006." Some policies, targets and plans from after the close of fiscal 2006 are also included.

References
• Environmental Reporting Guidelines (2003), Ministry of the Environment
• Business Owner Environmental Performance Indicator Guideline (2002), Ministry of the Environment
• Environmental Reporting Guidelines 2001-With Focus on Stakeholders, Ministry of Economy, Trade and Industry
• Sustainability Reporting Guideline 2002, Global Reporting Initiative

Past and Future Publications
We have published a report on an annual basis since first issuing our Environmental Report in 1998. Starting with the fiscal 2004 edition, we added content on our social responsibilities and changed the name of the report to the Environmental Sustainability Report. We plan to issue our next report in July 2007.

Regarding Future Projections, Plans and Targets
This report contains not only statements of past and present fact related to Mitsubishi Electric Corporation and its affiliates (Mitsubishi Electric Group), but also future projections, plans, targets and other forward-looking statements. Such projections, plans and targets constitute suppositions or judgments based on information available as of the time they are stated. Future business activities and conditions may differ from projections, plans and targets due to changes in various external factors. The Mitsubishi Electric Group conducts business in the form of development, manufacturing and sales in a broad range of areas, and these activities take place both in Japan and overseas. Therefore, the group’s financial standing and business performance may be affected by a variety of external factors, including trends in the global economy, social conditions, laws, tax codes, and litigation and other legal procedures, etc. We would ask readers to keep these points in mind when reviewing this report.
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Editorial Policy
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What are Mitsubishi Electric’s responsibilities?

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Editor’s Postscript
We will fulfill our social responsibilities by ensuring corporate ethics and legal compliance fully penetrate the mindset of each and every employee and by practicing a balanced corporate management that gives consideration to “Growth,” “Profitability and Efficiency,” and “Soundness.”

Prioritizing Corporate Social Responsibilities Since Our Founding

In recent years, the corporate operating environment has been undergoing dramatic changes. What must remain steadfast regardless of how the times may change is a commitment to corporate ethics and compliance and to not compromising on environmental problems and product quality.

This commitment was first articulated in the Keiei no Yotei, or Keys to Management, which was drawn up at the time of the company’s founding in 1921. The spirit of this document lives on today in our Corporate Mission and Seven Guiding Principles, which clearly state our intention to fulfill our social responsibilities as a corporation.

Economic Aspects

Ongoing Improvement in Corporate Performance

The entire Mitsubishi Electric Group has worked to carry out business restructuring and initiatives to boost competitiveness, which has resulted in higher income for four consecutive terms starting in fiscal 2003. We have achieved our management targets of return on equity (ROE) of 10% or more and a ratio of interest-bearing debt to total assets of 25% or less for two straight years since fiscal 2005, so in fiscal 2007 we further lowered our target for the ratio of interest-bearing debt to total assets to 20% or less. Going forward, we plan to further bolster our operating structure and plan to achieve an operating income ratio of at least 5% ahead of schedule.

As a part of this process, it is incumbent upon me to make our strong businesses stronger, continue structural reforms, and facilitate further improvement in corporate performance, while staying rooted in a balanced form of management that gives consideration to growth potential, profitability and efficiency, and soundness. That is to say, we will focus on bolstering development and production capacities for both software and hardware, improving quality from the development and design stage to sales and after-sales service, deploying and fostering human resources for achievement of these goals, and modifying our personnel system before large numbers of veteran, baby-boomer employees start retiring. At the same time, we will work to improve our financial standing by trimming out inventories and implementing other initiatives. We will also push forward with global integration to build an optimal business structure for the entire worldwide Group.

Furthermore, it is essential for a company to have pride in itself because pride constitutes the foundation of these activities. I feel that one of my most important responsibilities is to fully communicate a road map to our goals in order to make the company a place where all
employees are empowered to work with a sense of mission. It is my intention to make us a company that continually creates better products and services and delivers them to customers through a top-flight manufacturing and sales network, and to do this on a daily basis as a matter of course.

Consolidated environmental management on a global basis and offensive initiatives such as bolstering businesses that contribute to the environment. These initiatives are not confined to the Mitsubishi Electric Group alone, but extend to the various partners in our business activities. Carrying them out requires that we ceaselessly improve our technological capacities and maximize our production efficiency. I believe that creating good products and contributing to people’s lives is one of the important roles of a manufacturer, but such positive activities also bring about negative consequences like the consumption of resources and generation of waste. For many years I was involved in engine control systems for automobiles, so I constantly keep this thought in mind.

* RoHS Directive: An EU Directive that restricts the usage of six specified substances in electronic and electrical devices. From July 2006, it will no longer be possible to sell products that include any of the six substances in the EU.

Social Aspects

Making Corporate Ethics and Compliance an Enduring Foundation

The Mitsubishi Electric Group recognizes the importance not only of fulfilling social responsibilities through its corporate activities, but also of contributing to society through its various products and technologies. In fiscal 2006 we became the first company in Japan to develop technology for automatically diagnosing the existence of earthquake-caused damage in elevators and automatically restoring operation when no problems are detected. Another technology that contributes to the safety and security of society is our MISTY1 64-bit block cipher algorithm, which has been adopted as an international standard. We are also partnering with Shizuoka Prefecture’s Shizuoka Cancer Center in research and development on cancer treatment technology that uses next-generation proton therapy. It is expected that this technology will substantially contribute to medical advancements.

At the same time, however, in fiscal 2006 we also gave our stakeholders some cause for concern due to the accidental disclosure of customer information. We plan to enhance education, strengthen internal controls and take initiatives to strengthen compliance with the cooperation of the Group as a whole. The goal will be to create more stringent rules for the protection of customer interests and ensure corporate ethics and compliance are fully observed, as they constitute a company’s enduring foundation.

The Mitsubishi Electric Group promises to constantly make changes for the better and to continue to persevere in our efforts.
Corporate Governance

We will strive for sustained growth by working to further improve management flexibility and transparency and by strengthening management supervision. We also intend to further raise corporate value by building systems capable of precisely meeting the needs of customers, shareholders and all other stakeholders.

Separating Business Execution from Supervision as a Company with Statutory Committees

Mitsubishi Electric formally became a company with statutory committees in June 2003 and reforms were made to our management structure. We effectively separated business execution from management supervision, with the former handled by executive officers and the latter by the Board of Directors. Executive officers carry out business within the scope of their respective duties, while particularly important matters are taken up and decided at the Executive Officers’ Meeting, which is made up of all executive officers. For auditing and supervision, the internal auditors (Corporate Auditing Division) conduct internal audits to maintain legal compliance and ensure management efficiency. Audit reports are submitted to the Auditing Committee and executive officers in charge of auditing. In addition, the Auditing Committee discusses auditing policies, methods, implementation and results by holding regular reporting sessions with the accounting auditors and internal auditors.

Committees have also been established within the Board of Directors; namely, the Nomination Committee, Auditing Committee and Compensation Committee. Directors are selected to serve on the committees depending on their experience and expertise. Each committee is made of up five directors, three of whom are outside directors.

With regard to the selection of candidates for the position of director, executive officers responsible for functions that are directly related to matters deliberated on by the President and the Board of Directors (corporate strategic planning, accounting and finances, and general affairs and human resources) are chosen for directorships with concurrent executive officer duties. Directors who do not serve concurrently as executive officers are selected from among individuals with experience as an executive officer at the company or with experience as the president or the equivalent at an affiliated company. Such candidates must also be deemed suitable for providing supervision of the company’s management.

For the position of outside director, individuals qualified to supervise the company’s management are selected from among people with experience in corporate management, experts in various fields, and distinguished scholars. The Auditing Committee is comprised of five directors, three of whom are outside directors. Audits of directors and executive officers with regard to the performance of their duties and investigations of subsidiaries are conducted under the leadership of Auditing Committee members responsible for such investigations, in accordance with the policies and division of duties established by the committee.

Basic Approach to Internal Control Systems

Our basic approach to internal control systems is as follows. The Chairperson of the Board of Directors, who has ultimate responsibility for management supervision, and the President, who also serves as chief executive officer, are different positions held by different people. Neither the Chairperson nor President serves as a member of the Nominating Committee or the Compensation Committee. Clearly separating management supervision from execution makes our system of corporate governance more effective. Executive officers are responsible for maintaining compliance and ensuring management efficiency within the scope of their respective duties. Operations are audited by internal auditors (Corporate Auditing Division). Internal auditors submit auditing reports to the Auditing Committee and executive directors in charge of auditing, while outside auditors report to the Auditing Committee.
Risk Management

We take a multifaceted approach to the management of risk to ensure the stable continuation of business activities and fulfill our responsibilities to stakeholders.

Risk Management System
The risk management system of the Mitsubishi Electric Group is built based on executive officers having responsibility within the scope of their respective duties. In addition, the Executive Officers’ Meeting, which is made up of all executive officers, deliberates and decides on important matters pertaining to top management execution. The meeting ensures the participation of all executive officers in management, facilitates the communication of information among all parties, pursues management synergies and conducts multifaceted risk management for the entire Mitsubishi Electric Group.

Responding to Environmental Risk

Developing Response Procedures Specifically for Environmental Risk
The Group works to quickly discover latent risks in business activities that could impact or potentially impact the environment in a substantial way.

In order to prepare for the event of an accident or emergency, head office divisions, which are responsible for manufacturing facilities, R&D centers, branch offices and affiliates, as well as branch offices, which handle sales operations, both developed detailed risk descriptions and procedure manuals that specify departmental responsibilities. Branch offices also anticipate the possibility of accidents, claims, or violations of the law occurring at construction subcontractors or companies working under outsourcing agreements, make these outside parties aware of our risk response procedures, and request that they ensure the procedures permeate their respective organizations.

Verifying the Adequacy of Emergency Response Procedures with Annual Tests
Each of our business sites run tests once a year to determine if the managers in charge are capable of appropriately responding to an emergency. The tests simulate an emergency that has the potential of occurring to determine whether communication channels, the chain of command, movement methods at the site, and reporting procedures function properly. When problems are uncovered, the procedures are revised and the new version is publicized throughout the organization. The tests also serve as drills for employees to become proficient in the response procedures.

Creation of Disaster Response Manual for Major Earthquakes
Mitsubishi Electric created a disaster response manual in April 1996 to minimize injuries and physical damage and facilitate prompt relief and recovery in the event of a major earthquake. It includes advance measures and establishes a disaster response organization and a code of conduct during the response directly following an earthquake.

We have also established use of a digital Multi Channel Access (MCA) wireless system as an emergency lifeline. In addition we are presently researching the use of multiple means of communication, including cell phone-based email, and running tests on some of the systems.

Response to Accidents and Natural Disasters

Ensuring the Safety of People and Infrastructure
Mitsubishi Electric has a system for responding to accidents and natural disasters in which the Disaster Response Headquarters, Management Response Headquarters and Business Group Response Headquarters work together under General Headquarters, which is headed by the President.

In the event an emergency situation involving an accident or natural disaster arises, we first ensure the safety of people and physical infrastructure, then work to restore operations. The safety of people and physical infrastructure is our most important priority, so educational activities are conducted by our Health and Safety Committee on a regular basis to ensure prompt action is taken, and general disaster prevention drills are conducted every year that include drills on escape routes and extinguishing initial outbreaks of fire.

In addition, reporting on the impact inside and outside the company follows a set channel, from the business site to the business group’s administrative department to the Group President of the business group to the President. A company-wide response is determined and taken while instituting emergency measures at each stage.
Compliance

Carrying out corporate activities that are in accordance with the dictates of the law and ethics is one of the most important tasks of management, and to this end we are working to enhance our system for promoting legal compliance and devoting resources to educating employees.

Establishing and Raising Awareness of the Corporate Ethics and Legal Compliance Statement

Mitsubishi Electric first clarified its understanding of corporate ethics and established a written code of conduct in April 1990. A series of amendments were made over time to incorporate the establishment and abolishment of laws and ordinances as well as changes in society. In 2001, we announced a Corporate Ethics and Legal Compliance Statement comprised of six basic principles: compliance with the law, respect for human rights, contribution to society, collaboration and harmony with the community, consideration of environmental issues, and awareness of personal integrity.

We have explained these principles in a booklet, the Code of Conduct for Corporate Ethics and Compliance, which is currently distributed to every member of the Mitsubishi Electric Group. We also display posters inscribed with the Corporate Ethics and Legal Compliance Statement, make it mandatory for all employees in Japan to carry a card containing the statement and principles with them, and otherwise promote initiatives to make the entire organization fully aware of our policies in this area.

We are currently working on revisions to the Code of Conduct for Corporate Ethics and Compliance to incorporate January 2006 amendments to the Antimonopoly Law and the April 2006 enactment of the Whistleblower Protection Law. Plans call for us to distribute the revised version to all members of Mitsubishi Electric and Japanese affiliates.

System for Raising Awareness of Corporate Ethics and Compliance Throughout the Organization

The Corporate Compliance Committee, which is chaired by the executive officer responsible for legal affairs, takes the lead in promoting corporate ethics and legal compliance for the Group as a whole, both in Japan and overseas.

Efforts are made to make employees fully aware of matters decided by the committee in Japan. Legal compliance managers have been appointed in each division to conduct education and awareness-raising activities. Key personnel for legal compliance have also been appointed to provide assistance for legal compliance managers.

Overseas, each company formulates its own corporate code of ethics based on the Code of Conduct for Corporate Ethics and Compliance while taking into consideration local laws, regulations, culture, and customs. Compliance committees also meet to ensure the code becomes firmly entrenched in the organization.

Internal Communication Channels Established Inside and Outside the Company

Mitsubishi Electric has set up an ethics and legal compliance hotline to prevent improper conduct before it occurs. The information communicated through the hotline is investigated by the Legal Division’s Legal Compliance Office, and if improper conduct is discovered, the investigated division is requested to punish the perpetrator or institute corrective measures. Anonymity and other protections for the whistleblower are prescribed in internal rules along with a prohibition against unfair treatment of whistleblowers. In addition, an external communication channel was set up at the offices of legal counsel in conjunction with enforcement of the Whistleblower Protection Act. These communication channels are open to affiliate companies in Japan as well.

Annual Compliance Audits

Our Auditing Division leads audits of corporate ethics and legal compliance at the business divisions of Mitsubishi Electric and affiliated companies in Japan and overseas.

Manifold Methods Used to Educate All Employees

Mitsubishi Electric conducts on-demand education regarding compliance through e-learning, group classes, and correspondence classes. We also hold compliance seminars as appropriate. Managers in each division also distribute materials containing commonplace examples, practice lessons, and other information in an effort to prevent the occurrence of improper conduct. Mitsubishi Electric’s Legal Division and Associated Companies Division provide support for education at domestic Group companies, and visit the companies to hold compliance seminars as necessary.

Overseas, our companies run compliance training while taking into account local laws, regulations, culture, and customs.

Corporate Ethics and Legal Compliance System

- Established in 1991 (concurrent with the creation of the Charter of Corporate Behavior by the Keidanren)
- Role: Promote compliance activities and create rules of conduct for the Mitsubishi Electric Group
- Composition:
  - Chairman: Executive officer responsible for legal affairs
  - Members: General managers of corporate staff divisions, including the Legal Division and Human Resources Division
  - Observer: Auditing Committee members in charge of investigations
- Secretariat: Legal Division
- Meeting Schedule: Semi-annually; chairman reports the results of deliberations to the Executive Officers’ Meeting
- Ethics and Legal Compliance Hotline:
  - Established in 2002
  - Hotline for internal reporting of legal violations, improper behavior or unethical conduct by an organization or individual employee
  - Phone, email, letter (anonymity possible)
  - Whistleblower protection regulations
  - Fact-finding investigations and imposition of corrective measures
- Position established in 1995
- Concurrently serve as staff in support of top divisional management
- Promote ethics and compliance activities within the division (voluntary audits, compliance education, awareness-raising regarding matters decided by the Corporate Compliance Committee, etc.)
- Established in 1996
- Multiple personnel appointed to line sales departments and technical divisions
- Promote ethics and compliance activities in their respective divisions under the Legal Compliance Managers
Ensuring Information Security Management

We strive for constant improvement by following a plan-do-check-act cycle in order to appropriately manage personal information and confidential corporate information.

Protecting Both Individual Customer Information and Corporate Customer Information

The Mitsubishi Electric Group sometimes has occasion to obtain the personal information of customers through questionnaires, registration of purchased products and after-sales service. We have always been careful in handling this information, but in order to take extra precautions we reinforced its management by announcing a personal information protection policy in April 2004 and revising our rules pertaining to the protection of personal information.

We strengthened security management not only for personal information but also for Confidential Corporate Information, which include sales information, technical information and intellectual property. This information is managed through organizational, human, physical and technological security measures.

For the information that has been entrusted to us by other companies, we by all means uphold confidentiality agreements, and we also work to manage and protect such information using the same security measures we use for our own information.

As a part of this effort, in February 2005 we announced the “Declaration of Confidential Corporate Information Security Management” in order to clearly publicize our stance both inside and outside the company on the proper handling of various types of information.

Confidential Corporate Information and Security Measures

PDCA Cycle Applied to Information Security Management

Mitsubishi Electric strives to constantly make improvements in its activities for managing Confidential Corporate Information and to protect personal information through application of a plan-do-check-act, or PDCA, cycle.

First of all, we revised internal rules as needed to comply with current law. Also, we have been conducting e-learning educational training since fiscal 2005 and distributed procedures for the management of company secrets to all Mitsubishi Electric employees in October 2005 in order to ensure employees are fully aware of the goals of the “Declaration of Confidential Corporate Information Security Management.”

In addition, self-audits are conducted at the workplace level along with internal audits by staff from the head office on the status of Confidential Corporate Information and personal information management. Systems and mechanisms have been established at affiliate companies as well, based on the policies laid out by Mitsubishi Electric and in accordance with the conditions prevailing at each company and location.

We intend to improve the quality of management across the entire Group by building and following PDCA procedures for the protection of Confidential Corporate Information and personal information.

Structure of Responsibilities for Ensuring Information Security

Regarding Information Leaks at Mitsubishi Electric

In June 2005 a series of incidents occurred involving information leaks at the Mitsubishi Electric Group. One of these involved the divulgation of confidential corporate information that included an inspection report regarding maintenance of electric facilities at a power plant contracted to Mitsubishi Electric. Information was leaked out when the personal computer of an employee at one of our wholly owned subsidiaries was infected with a virus and the information was sent out over Winny, a type of file sharing software. Other incidents were caused when the personal computer of an employee that was used for business purposes was stolen and when an external memory device was lost.

Because we take these incidents very seriously, we issued emergency instructions in June to everyone in the company and at our affiliates in order to ensure all employees understand the importance of managing Confidential Corporate Information and protecting personal information. The instructions included a prohibition on the business use of computers owned by individuals, the tightening of procedures for taking confidential corporate information outside the company, deletion of unnecessary software, and implementation of anti-virus measures. Also, in July we implemented additional measures, revamping our management systems and shoring up room access management.

Moreover, having reflected critically on these incidents, we conducted training courses for all employees via e-learning and group seminars.

We would like to express our sincere apologies to our customers for these incidents. To prevent their recurrence, we will work to improve Information Security Management and personal information management by both raising the awareness of employees and building robust security systems.
Corporate Profile and Business Overview

Business Segments & Major Products (March 31, 2006)

Energy and Electric Systems
- Turbine generators
- Hydraulic turbine generators
- Nuclear power plant equipment
- Motors
- Transformers
- Power electronics equipment
- Circuit breakers
- Gas insulated switches
- Switch control devices
- Surveillance system control and security systems
- Electrical equipment for locomotives and rolling stock
- Elevators
- Escalators
- Particle beam treatment equipment

Industrial Automation Systems
- Programmable logic controllers
- Inverters
- Servomotors
- Human-machine interfaces
- Motors
- Hoists
- Magnetic switches
- No-fuse circuit breakers
- Short-circuit breakers
- Transformers for electricity distribution
- Time and power meters
- Uninterruptible power supplies
- Industrial sewing machines
- Computerized numerical controllers
- Electrical-discharge machines
- Laser processing machines
- Industrial robots
- Clutches
- Car audio equipment
- Car navigation systems
- Automotive electrical equipment
- Car electronics

Information and Communication Systems
- Wireless communications equipment
- Mobile handsets
- Cable communications systems
- Satellite communications equipment
- Artificial satellites
- Radar equipment
- Antennas
- Missile systems
- Fire control systems
- Broadcasting equipment
- Data transmission devices
- Information systems equipment
- Systems integration

Electronic Devices
- Power modules
- High-frequency devices
- Optical devices
- LCD devices
- Printed circuit boards
- System LSIs
- Others

Home Appliances
- Color televisions
- Projection TVs
- Display monitors
- Video projectors
- VCRs
- DVDs
- Room air conditioners
- Package air conditioners
- Refrigerators
- Electric fans
- Washing machines
- Ventilators
- Solar power generation systems
- Hot water supply systems
- Fluorescent lamps
- Indoor lighting
- Clean-air heaters
- Compressors
- Chillers
- Humidifiers
- Dehumidifiers
- Air purifiers
- Air-conditioning systems
- Showcases
- Cleaners
- Microwave ovens
- Others

Diamond Vision
Programmable Logic Controllers
Mobile Handsets
DP-IPM Ultra-Small Package Version 4 Series
Digital AV Products

* Screens display simulated images.
What are Mitsubishi Electric’s responsibilities?

Here, we focus on three technical areas.

Global warming, ozone layer destruction, environmental pollution, water shortages, resource depletion, various crimes and risks... the list of issues that threaten the future of humankind and the earth we inhabit seems endless.

Mitsubishi Electric looks at ways to protect people and the environment through the development and sale of industrial products.

Here, we focus on three technical areas.
GOSAT, which will Measure Greenhouse Gas Concentrations on a Global Scale

Halting global warming is a vital theme that is shared by all peoples.

The Kyoto Protocol, which went into force in February 2005, accelerated international initiatives, such as requiring advanced nations to reduce their carbon dioxide (CO_2) emissions by 6–8% annually, compared to their fiscal 1991 levels, over the five-year period from 2008 through 2012. As part of these efforts, Japan is developing the ‘Greenhouse gases Observing SatellitE (GOSAT),’ which it plans to launch in August 2008.

This satellite, a joint development project between the Japan Aerospace Exploration Agency (JAXA), the Ministry of the Environment (MOE) and the National Institute for Environmental Studies (NIES), is designed to measure global distributions of greenhouse gas concentrations from space. Terrestrial observation, the current practice, provides relatively few observation points, introduces regional bias and presents the problem of different observation equipment being used in different regions. Such factors make the accurate measurement of distributions on a global scale difficult. GOSAT will measure the density distribution of CO_2 and methane gas from approximately 56,000 observation points around the world. By repeating these observations with a rapid three-day frequency, the satellite should be able to determine the status of gas emissions on a global scale with a high degree of accuracy.

As the company responsible for developing the satellite bus, Mitsubishi Electric is playing an important role in the GOSAT project, which should greatly accelerate the prevention of global warming. As an integrated manufacturer of satellites, over the years we have contributed to a number of space development plans. This is a project that can affect the future of humankind and the earth itself. We are bringing the experience and expertise we have cultivated over many years to bear in making this project a success. We add our strong determination to the development process.

**Please take advantage of your satellite development expertise.**

The atmospheric concentration of CO_2 is increasing at a rate of approximately 4 parts per million each year. Measuring such minute changes requires sensitive CO_2 sensors, but the measuring equipment used on satellites in the past was carefully designed for completely different purposes, such as determining the oscillation of the satellite and controlling heat. In all, measurements were required on each of the nearly 200 types of materials used. This is a short-term project, however, with its launch planned to comply with the Kyoto Protocol’s first commitment period in 2008. We anticipate that Mitsubishi Electric will take full advantage of its experience to date, to develop a highly reliable satellite.

Takashi Hamazaki
Project Manager of the GOSAT Project Team for the Japan Aerospace Exploration Agency

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**Our Role in the GOSAT Project**

JAXA
Develop launch and operate the satellite, and acquire observation data

MOE (Ministry of Environment)
National Institute for Environmental Studies (NIES)
Based on the data acquired, understand the situation regarding greenhouse gas absorption and emission

**Mitsubishi Electric**
Responsible for developing the satellite bus (excluding mission equipment)

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**Orbiting the Earth Once Every 98 Minutes Acquiring Data at 56,000 Points on the Earth**

From a low-earth orbit at a height of 666 km, GOSAT will circle once every 98 minutes, draping a fine observational mesh over approximately 180 km in four directions and collecting data at approximately 56,000 points. Conventional terrestrial observation, on the other hand, offers relatively few observation points, and sites are concentrated in the northern hemisphere, making global distributions difficult to grasp.

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**Major Equipment is Redundant, So Observation Can Continue Even If a Problem Occurs**

- Optical Solar Reflector
- Clouds and Aerosol Sensor
- Technical Data Acquisition Equipment
- Greenhouse Gas Observation Sensor
- X-band Antenna
- S-band Antenna
- Monitoring Cameras
- S Band Antenna
- X Band Antenna

Learning from the accidents that satellites have experienced in the past, GOSAT’s designers are paying close attention to a design that ensures a low potential for failure. For example, rather than a single wing, GOSAT employs two solar cell paddles, and all major components are redundant so that, even if an accident were to occur, the satellite would be able to continue its observations.

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A full-scale model of GOSAT on display at Expo 2005, Aichi, Japan
What are Mitsubishi Electric’s responsibilities?

Using Security and Encryption Technologies to Protect People and Information

Along with advances in information and globalization, current-day society is plagued by crimes that are becoming increasingly international, heinous and skillful. As a result, people are asking for increased security at a growing number of locations. Mitsubishi Electric views the employment of its numerous technologies and extensive expertise to ensure people’s security and safety as part of its social mission.

In the area of physical security, for example, we have begun employing a motion detection function that we developed in home security systems. As a comprehensive electric product manufacturer, we also apply the technologies that we have cultivated in a variety of security system products, such as building security systems that employ room entry verification, image monitoring and sensor observation. In the field of information security as well, we have developed many of our own technologies, which are used in applications ranging from file encryption to physical authentication, electronic authentication, content protection, log monitoring and analysis.

Among these developments, our MISTY encryption technology has received particular acclaim. In addition to being hailed by the International Organization for Standardization (ISO) as “the encryption algorithm with the highest level of security in the world,” MISTY has been customized as KASUMI, which is also the international encryption standard for 3G mobile phones. Recognizing the broad range of potential roles MISTY can fulfill, we have made its basic patent available free of charge, and its application is spreading into a variety of fields.

We envision a society in which all people can live with a sense of security. Mitsubishi Electric is one of the front-runners that are turning this vision into reality.

“Mitsubishi Electric offered an excellent proposal that incorporated the needs of our hospital.”

Our hospital uses Mitsubishi Electric’s MISTY encryption technology for PLANET, a medical information network used by regional healthcare providers and patients to share electronic medical records. Our physicians have long been hoping for a system that allows case information to be stored on removable media, taking security sufficiently into account. We have introduced Mitsubishi Electric’s CRYPTOFILE LOCK for MOBILE. We can reduce the risk of information leaks with a specially encrypted USB memory, which is the only removable media for connection to electronic medical record terminals. The system is currently popular with our physicians.

Tomio Itoh
Deputy director
Management Information Systems Headquarters
Kameda Medical Center
Our Water Resource Recycling System Is Helping to Alleviate World Water Shortages

Affected by rapid population increases and economic development, many countries are facing serious water shortages. In addition to making people’s lives more difficult, a dearth of water resources can significantly impact global food crop production. In recent years, such persistent substances as endocrine disturbances have been contaminating water supplies and threatening the ecological system of which humans are a part. Ensuring safe water supplies is an international issue. In this situation, Mitsubishi Electric’s water treatment technologies are gaining much attention.

About 40 years ago, we developed and introduced ozone-based purification water-treatment technologies. Throughout Japan, these technologies are now employed in the high-end treatment and recycling of sewage. In addition, the method is used in the water treatment process to remove offensive odors and reduce trihalomethane, thus improving the taste, quality and safety of tap water.

Moreover, through the combined application of ozone and ultraviolet rays, which breaks down and eliminates most difficult persistent substances organically, we have developed a method that successfully removes 90% of persistent substances using only 40% of the energy that is required in conventional wastewater-treatment methods. Using this technology, we are participating in the Development of Energy Efficient Wastewater Treatment Technology Project of the Ministry of Economy, Trade and Industry.

The water resource recycling system that we have developed using our own technologies can be operated anywhere that has access to electricity. In the future, we will work on the practical development of this system to ensure better safety and reduce costs, as we seek to solve the issue of global water resources.

“We look forward to using the advanced oxidation process in the treatment of wastewater.”

As wastewater treatment becomes more advanced, water quality is improving but energy consumption is also rising. The direct relationship between energy consumption and cost means that energy-saving functions are increasingly important to commercialization. Demonstration tests at Expo 2005 Aichi Japan showed that this method reduces energy consumption by about 40% compared with conventional wastewater treatment methods. As concern grows about global water shortages, I believe the implementation of energy-saving wastewater treatment will have major significance. I hope you will bring this method into the marketplace, after taking into account many ideas for refinements and improvements. I can see that it will become popular.

Ichiro Fujiwara
Environment Technology Development Department
New Energy and Industrial Technology Development Organization
What are Mitsubishi Electric’s responsibilities?

“Uni” and “Eco” Concepts for Designing Products with Our Customers

“Uni” stands for the concept of universal design, which leads to products that are easy to use for as many people as possible. “Eco” refers to ecology, and indicates that the environmental impact of a product is low prior to, during and after its use. Mitsubishi Electric creates products to embody these two concepts, taking into account a wide variety of input from our customers.

A Usability Workshop
Here, we elicit opinions on the operability and ease of use of a remote control for a newly developed air conditioner.
Moving toward the Concept of “Good for the Planet. Good for the People.”

In February 2005, Mitsubishi Electric introduced Uni & Eco as an overall brand for home appliances. For many years, we have concentrated on the development of products that are easier to use and more energy saving and recyclable. Uni & Eco takes these efforts to the next stage by employing “universal design and ecology” to provide products that are “Good for the Planet. Good for the People.”

Our goal for universal design is to ensure that products can be used by as many people as possible, regardless of age, gender or capabilities. We use LCA to create products with a reduced environmental impact that are ecologically friendly before, during and after use.

Our lineup of Uni & Eco home appliances covers 15 product categories, including air conditioners; LOSSNAY (energy-efficient ventilation system); IH cooking heaters; dishwashers with dryers; oven ranges; washers and dryers; LCD televisions; DVD recorders; bath drying, heating and ventilation systems; Eco Cute (electric heat pump water heaters that use natural refrigerants); and photovoltaic power generation systems, allowing an entire household to be fitted with Uni & Eco products. If a home were equipped with the 11 products mentioned above, the life cycle CO\textsubscript{2} of a typical home would decrease by approximately 49%. (Based on our own comparisons. Refer to the illustration on the lower right.)

Interaction with customers is essential to the realization of Uni & Eco products. Therefore, from an early stage in product development, we ask a variety of people, including senior citizens and disabled people, to become test users. We then reflect on their comments in our products.

1. LCA: Life Cycle Assessment
   This is a methodology for quantitatively and comprehensively evaluating the environmental impacts of a product through its entire life cycle. This includes everything from resource extraction, design and manufacturing to transport, use and disposal.

2. “Life cycle CO\textsubscript{2}” refers to the total amount of CO\textsubscript{2} that a product emits over the course of its lifetime, and is calculated using our internal standard LCA database. The illustration on the lower right shows the reduction in life cycle CO\textsubscript{2} values for various products, allowing comparison between previous and new products. Household CO\textsubscript{2} values comprise the total of life cycle CO\textsubscript{2} values for 11 products, using previous and new products for comparison.

Fundamental Considerations for Universal Design

- Consideration for the feelings of people who use the products
- Simplicity and ease of use
- Easy to distinguishable displays and expressions
- Comfortable posture, consideration for minimizing strain on the body
- Safety and convenience

Comments from a Researcher on LCA Evaluation Technologies

‘Pre-use’ ecology takes the environment into consideration when selecting materials.”

Mitsubishi Electric uses life cycle CO\textsubscript{2} as one of the important standards when internally approving eco products, and all new products are subject to LCA. In fiscal 2006, we applied LCA to Uni & Eco products throughout the entire household, calculating CO\textsubscript{2} reduction volumes. Life cycle CO\textsubscript{2} requires consideration from the “pre-use” stage of development and design. By proactively selecting materials that are recyclable, as well as fulfilling the needed functions, we can substantially reduce CO\textsubscript{2} emissions. As a comprehensive electrical product manufacturer, I look forward to our company continuing to develop a wide range of products that feature reduced environmental impact.

Etsuko Hirose
Environmental Analysis and Evaluation Division, Advanced Technology R&D Center

Using Uni & Eco products throughout the entire household (11 representative products) would reduce life cycle CO\textsubscript{2} by approximately 49% (using 11 representative products).

<table>
<thead>
<tr>
<th>Product</th>
<th>Percentage reduction in life cycle CO\textsubscript{2}</th>
<th>Universal design points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air conditioners</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Remote control</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>DISHwashers with dryers</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>IH cooking headers</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Oven ranges</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>Washers and dryers</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Eco Cute</td>
<td>62%</td>
<td></td>
</tr>
</tbody>
</table>

Using Uni & Eco products throughout the entire household (11 representative products) would reduce life cycle CO\textsubscript{2} by approximately 49% (using 11 representative products).
Monitors Used to Determine Easy-to-Use Designs

Our concept of universal design (UD) is “creating products that are easy for more people to use and creating an environment that makes living easier.” The keys to achieving these goals are ease of understanding and distinguishing, being in a comfortable posture, minimizing strain on the body, safety and convenience.

At the same time, different categories of customers use some products differently, so the need for UD is by no means universal. For this reason, the UD level of each product must take into consideration its characteristics and the market environment in which it is used. In other words, the ultimate goals must be outlined clearly. From this perspective, we have established four UD levels: senior citizens, people with disabilities, children and general users who can use products on their own. A goal is set for the development of each product, and we have introduced an original “UD Checker” system that we use during design to manage the extent to which targets are being met.

In addition, at the product development stage, we also employ test users that comprise a group of general users to determine ease of use and operability, eliciting their opinions through “usability workshops.” From numerous prototypes, only the products that are confirmed as being easy to understand and use are recognized internally as Uni products that we introduce into the marketplace.

All Products Undergoing LCA Make a Variety of Environmental Impacts Readily Apparent

Our 4th Environmental Plan, which went into effect in fiscal 2004, set the requirement that all products must undergo LCA. The goal was to enumerate life cycle CO2 for each product, and establish objective indicators. We wanted to ensure that our efforts to develop Eco-Products, would not fall by the wayside and that our overall operations would step up their efforts to reduce environmental impact. Even the development of Eco-Products with good environmental features is of no use unless we take into consideration the environmental impact of the entire life cycle.

Normally, when people speak of a product’s environmental impact, they refer to the energy that is needed to operate the product, and the resulting CO2 emissions. But many resources, and a great deal of energy, are also used in the “pre-use” phases of material procurement, product manufacturing and distribution. Once the useful life of a product is over, its disposal and recycling require resources and energy. For these reasons, LCA takes into account the environmental impact, in terms of calculated CO2 emissions, of a product in its pre-use, use and post-use stages. Once this information is known, we work to reduce the negative environmental impact of the product in all processes, throughout its supply chain and through to recycling.

We mentioned that if a home used the 11 Uni & Eco products that were introduced earlier, life cycle CO2 would decrease 49%. This is one such example. By reducing the negative environmental impact of manufacturing activities and through the recycling of products that are no longer in use, we are conducting in-house environmental preservation activities that are not easy for consumers to see. By enumerating these effects, in the future we hope to make such efforts more readily apparent.
The goal was to enumerate life cycle CO₂ emissions, for our 4th Environmental Plan, which went into effect in fiscal 2004. To facilitate ease of understanding and distinguishing, we want to ensure that our products are easy to use. This is especially important in fields like AV equipment, where we are working on UD rules that cut across product categories.

Hiroshi Asaoka
Home Systems Design Division, Industrial Design Center

What are Mitsubishi Electric’s responsibilities?

 Normally, when people speak of a product’s environmental impact, they speak of CO₂ emissions. However, for Mitsubishi Electric, it’s necessary to consider the entire life history of a product, from its development and manufacturing to recycling. The company is conducting in-house environmental preservation activities through the recycling of products that are no longer in use, and we are working on UD rules that cut across product categories.

Comments from a Person Responsible for Universal Design Division

“We reflect the opinions of all our test users.”

The more functions that air conditioners have, the more complex the displays and rows of buttons on their remote controls can become. To make the controls easier to use, we have made them simpler and easier to understand. At the prototype evaluation phase, 45 test users checked our remote controllers for ease of operation and judged that the depression on the back improved its fit. Taking into account the opinion that “The overall feeling should be ‘round,’” resulted in a remote control that is similar to no others to date. In the future, we plan to use this design as the development base for remote controls on AV equipment, and we are working on UD rules that cut across product categories.

Hiroshi Asaoka
Home Systems Design Division, Industrial Design Center

Recycling Air Conditioner Fan Materials for Reuse as Fans

The cross-flow fans that are used in room air conditioners are made of ASG fiberglass-reinforced resin, which makes up 13% by weight of all plastics used in an air conditioner’s indoor unit. In the past, separating out the glass fiber and other products when recycling these fans was difficult. In cooperation with Toray Industries, Inc., we have begun reusing ASG, which is separated at recycling centers, as a material for fans. As such, we have developed a closed-loop recycling technology for the first time in the industry. The material characteristics are nearly the same as those of virgin material. We began producing these fans in February 2005 at our Shizuoka works.

Comments from a Collaborating Developer of Material Recycling Technology

“I was very impressed by Mitsubishi Electric’s conviction.”

From the very beginning of our development of ASG closed-loop recycling technology, key-personnel from Mitsubishi Electric’s development and manufacturing divisions participated, giving us the feeling that we had to make a success of this. I was also surprised that they sent 1,000 samples over to us for testing. Seeing this level of conviction, we made some capital investments of our own so that we could provide a steady supply of recycled materials. Our company has developed a number of compound resin recycling technologies up to the present, but never has anyone worked so closely with us and shown their dedication to taking the environment into account in their manufacturing.

Akira Kadoi
Plant Manager, Chiba Factory, Toray Industries, Inc.

Comments from a Recycling Technology Developer

“Let’s raise the percentage of closed-loop recycling for even more resins.”

As we procure much of the ASG used in our cross-flow fans from Toray Industrial, Inc., they were the ones who worked with us to jointly develop this recycling technology. Because the degree of degradation of resins collected from used air conditioners is totally different, it was very difficult to evaluate the material properties. To find the optimum blend between recycled materials and virgin materials, we had to work through myriad stacks of data on the age-related deterioration of reused materials, and I greatly appreciated Toray’s forward-looking cooperation. I’m pleased that the technologies we developed will help contribute to environmental preservation. In the future, I hope we can raise the closed-loop recycling percentage for other resins, as well.

Shuichi Iwata
Manufacturing Administration Division, Shizuoka Works

Comments from a Test User

“Please do your best to take customers’ opinions into account.”

The letters on the new display panels of your air conditioners are large and easy to read, and I think the rows of buttons have become easier to use. It’s nice for products to have lots of features, but this often makes them harder to use for us. I was also involved with manufacturing in my day, so I do understand how difficult it can be to achieve both objectives. I think you should keep this opportunity to elicit consumers’ opinions. You will garner lots of opinions, but at the end of the day I think you need to take overall opinions into account when you deliver final products.

Yutaka Nakajima
Resident of Kamakura City

Infrared Sensor Detects Temperature Imbalance and Controls Air Flow

Using conventional equipment, sometimes electricity is used unnecessarily, as warming the feet means that overall room temperature is higher than needed. This air conditioner uses a sensor that scans the room from left to right, detects parts of the room that are emitting infrared rays, then automatically adjusts the temperature at that spot in the room. This product automatically controls air currents so that your feet can stay warm, but temperature imbalance is controlled to reduce the unnecessary expenditure of energy.

Hyper Cycle Systems (recycling center)

Used air conditioners (interior units) → Cross-flow fan → Recovery and separation → Pulverized materials → Mitsubishi Electric’s Shizuoka Works → Toray Industries, Inc. Chiba Factory → Recycling Air Conditioner Fan Materials for Reuse as Fans

Mitsubishi Electric’s Shizuoka Works
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Yutaka Nakajima
Resident of Kamakura City
Changes for the Better in Thailand

About 10 years ago, the Thai economy was in a state of crisis. Since that time, the economy has recovered and development has been rapid. We currently operate 10 companies in Thailand. What responsibilities does Mitsubishi Electric, whose business is developing rapidly, have in Thailand? Here, we examine this question from three perspectives—the economy, the environment and society as a whole.

In This Article, We Introduce Our Companies in Thailand.

MKY Mitsubishi Electric Kang Yong Watana Co., Ltd.
Business Activities: Sales of air conditioners and household appliances
Established: 1971

MCP Mitsubishi Electric Consumer Products (Thailand) Co., Ltd.
Business Activities: Manufacturing and sales of home and industrial air conditioners
Established: 1989

META Mitsubishi Electric Thai Auto-Parts Co., Ltd.
Business Activities: Manufacturing and sales of electrical components for automotives and car audio equipment
Established: 1996

Company cafeteria that accommodates 1,000 (META)
We Support the Thai Economy by Contributing to the Development of Core Industries and Promoting Exports.

The Asian currency and economic crisis began in 1997. Despite being at the epicenter of the crisis, since that time the Thai economy has made a V-shaped recovery and continued to post remarkable growth. Although the country’s gross domestic product (GDP) shrank minus 10.5% in 1998, during the past few years, the economy has grown at rates of around 6% per year. In 2005, the economy grew by 6.3%, making it a leader among ASEAN nations. This expansion is partly attributable to government policies that expedited infrastructure development and permissions for capital investment, which attracted overseas capital.

In this environment, Mitsubishi Electric operates 10 companies in Thailand, including six manufacturing companies and two sales companies, altogether employing approximately 9,000 Thai workers. In fiscal 2006, our sales in the Asian region amounted to 213.8 billion yen, of which the Thailand Mitsubishi Electric group accounted for 143.1 billion yen.

Fueled by the country’s economic advancement, the Thailand Mitsubishi Electric Group has benefitted from developments in Thailand’s core automotive industry. META, which manufactures automotive parts, not only sells these parts to automakers in Thailand, but also exports them to Europe and Japan. Benefiting from the country’s high temperature and humidity, MCP, an air conditioner manufacturer and MKY, a home appliance sales company, have maintained top market share of the residential and commercial-use air conditioner market. MCP also exports air conditioners to the rest of the world, thereby contributing to the promotion of Thai trade.

Environmental Sustainability Report 2006

Promoting the Thai Automotive Industry

Thai government measures to promote the Thai automotive industry include low tariffs and efforts to attract foreign capital. Such measures have proven so successful in attracting automakers from throughout the world that Thailand is now referred to as the "Detroit of the East." In this business environment, META manufactures alternators, which generate electricity in automobiles, and the starters that initiate engine motion, as well as car audio equipment.

Thai Foundation Helps Make Higher Education a Reality

The Mitsubishi Electric Thai Foundation was established in December 1991 to provide scholarships for students who otherwise would not have the economic means to spend time studying. Although many Japanese companies in Thailand discontinued local support programs when management difficulties arose, we have continued this program, as we view it as part of our ongoing duty to share profits with the local societies in which we operate. To make the most effective use of this scholarship fund system, we work with engineering departments at participating universities. We also contribute to elementary school lunch programs and provide a range of ongoing academic support.
What are Mitsubishi Electric’s responsibilities?

The First International Eco-Products Exhibition Opens in Thailand
At the 2006 International Eco-Products Fair, which was held from October 6 through 9, we exhibited advanced environmental technologies such as recycling technologies that are used in our products, including those that are not available in Thailand. The exhibition attracted a major response from the government and business communities, as well as from our corporate customers, and helped to raise environmental awareness.

Exhibition-goers gather around a demo that models plastic recycling technologies

Poki Poki Motor® Employs Environmental Technologies and Contributes to Air Conditioner Energy Savings
Motors consume approximately 50% of the energy used in air conditioners. To address this issue, Mitsubishi Electric developed the Poki Poki Motor, which was introduced in 1995. The iron core is split like a hinge, and in this open state, coils can be wrapped around the core more effectively to increase its density, contributing to motor efficiency and compactness.

MCP uses the Poki Poki Motor in all its inverter air conditioners, contributing to the conservation of energy.

Environmental Perspective

To the Thai Market and Onward into the World Market Working to Provide Eco-Products

Although the Thai economy is developing, average per capita income remains at approximately 1/12th the average level of Japan. Therefore, when Thai people purchase home appliances, the most important considerations from the consumer’s viewpoint are price and durability. Energy savings and environmental functions typically are an afterthought. Like Japan, however, Thailand must import the majority of its oil, so the government is eager to promote energy-saving equipment. Companies are also starting to give consideration to equipment running costs and environmental protection.

Under these conditions, MCP, our air conditioner manufacturing company, has earned a Class 5 rating—the top level provided by the Thai electric power (Electricity Generating Authority of Thailand: EGAT) authority’s system for labeling products that offer energy-saving performance. MKY, which sells home appliances, has launched Thailand’s first energy conservation solutions business, targeting office buildings. The company proposes energy-saving air conditioning and management systems to building owners, encouraging reduced air conditioning costs and lower CO₂ emissions.

As MCP and auto parts manufacturer, META export their products to a number of countries outside Thailand, they are required to meet such standards as the European Union’s WEEE and RoHS Directives,*1 as well as the ELV Directive.*2 For this reason, both companies provide training for their employees and cooperating companies about products that have a reduced environmental impact. By the middle of 2006, META had successfully stopped using hexavalent chromium in all its products, and MCP switched over completely to the use of lead-free solder in all its products’ circuit boards. The company is now shifting to the use of new refrigerants that do not damage the ozone layer.

*2 The ELV Directive is an EU directive regarding end-of-life vehicles. This directive, which went into effect on October 21, 2000, restricts the use of certain hazardous substances in vehicles and is designed to facilitate recycling when vehicles are discarded.
Promoting Energy Conservation and Cleaner Wastewater at Plants

We are also working to reduce environmental impact at the manufacturing stage. When META, our auto parts manufacturer, constructed a new plant (completed in November 2004), the company employed manufacturing equipment so efficient that lighting and air conditioning equipment accounted for a larger portion of the company’s total energy use than the manufacturing equipment. To reduce the energy used by lighting, the luminous efficiency of the electronic stabilizers was increased, and arrangements were made so that daytime operation would require no overhead lighting. Spot air conditioning was employed to provide air conditioning only up to a level 2.5 m from the ground. Furthermore, the waste heat emitted by a local electric power company was employed as a coolant in air conditioning equipment. As a result of such measures, META succeeded in reducing its annual electric power consumption by approximately 1,300 kWh.

In addition, the quality of the plant’s wastewater is sample-checked each month, ensuring that its water retains a high quality ranking. In 2005, the company ranked second in a “clean factory contest” held in its industrial district. In fiscal 2007, the company aims to reduce electrical power and paper consumption by 2% from the previous year’s level, and all employees have been alerted to this aim through the META News, a monthly employee publication.

MCP, our air conditioner manufacturing company, initiated Just-In-Time production activities in November 2003. Under this system, each of 11 production teams receives training from an outside expert once every two months on activities to improve manufacturing efficiency. The company determined its per-unit production cost in fiscal 2004, and since that time has improved its product competitiveness through such measures as reducing power costs. In October 2005, the company introduced the cell production method*. This move helped to reduce the power requirements of a large-scale line, and thus to limit CO2 emissions.

* Cell production method: The basic idea of this system is for each worker to assemble a single product. This method compares with a manufacturing line, which requires lateral conveyor belt movement and in which activities are broken down into small parts performed by multiple workers.

“We provided the plant with a cogeneration system.”

We devised a cogeneration system, which uses the waste heat from steam to create a coolant for use in air conditioners, and provided META with the system. When we made our original proposal, we had no experience in delivering such a system to META, but we thought the idea itself would appeal to META’s sense of awareness of environmental preservation. We believed that if the proposal went well, META might embrace the idea. In the end, META did in fact accept delivery of our very first cogeneration system, which we have confirmed is operating reliably. Our foray into this business was possible mainly because of META’s enthusiasm.

Michael Baker
Country Manager and Chief Executive Officer
Thai National Power Co., Ltd.
By Supporting Increases in the Skills and Abilities of Employees and Partner Companies, We Ultimately Increase Customer Satisfaction

Whether in Thailand, Japan or any other country, companies support their employees’ efforts to increase their skills and abilities. In addition to employee satisfaction, this process contributes to higher customer satisfaction levels.

At META, our auto parts manufacturing company, each employee participates in technical training to raise his or her skills to a target level. This process has been successful in reducing the number of reject parts produced during the manufacturing process. At MCP, our air conditioner manufacturing company, raising skills is part of the quality improvement activities in which all employees participate. The company’s success in teaching such technical skills as brazing and soldering has succeeded in raising productivity levels each year.

MYK, our home appliance sales company, follows two operational indicators: the percentage of repairs that are completed within three days of receiving the request, and the percentage of ordered parts that are delivered immediately. The company’s target for the former is 75%, the same as in Japan, and for the second, 98.5%. Another indicator of this company’s efforts to raise customer service levels was the November 2004 start of service on large air conditioner installations 24 hours a day, 365 days a year. In the second half of fiscal 2006, the company began making post-repair follow-up calls to ask customers to evaluate their level of services. Moreover, recognizing the importance of providing training for partner companies, MCP and MKY have joined in providing installation courses and service seminars for dealers and installation personnel. Partner companies that have passed these in-house qualification standards are selected to provide service in outlying areas. To date, 30 companies have been authorized to provide back-up repairs and conduct routine visits on behalf of MCP and MKY. Supporting such partner companies is an important part of promoting the local air conditioner industry.
MCP and META take labor-management discussions seriously and are working to increase the number of local people who are involved in management. During managers’ daily rounds of the plant, they communicate with floor employees and pay close attention to what employees are saying. We will do our best to maintain close labor-management communications, pay attention to employees, listen to their complaints, requests and opinions, and respond appropriately. Some successes to date have been to change menus at the company canteen and to alter the commuter bus route. Both of these ideas on improving employee welfare incorporated employees’ ideas.

Also, we believe it is very important to pay attention to workplace safety and hygiene. The plant has an on-site clinic where anyone who wants can undergo consultation, and the company provides annual health checks that vary depending on the characteristics of each employee’s work. The company has organized a safety and environmental office, and each month a safety meeting is held to share information on dangers. Safety patrols are in place to respond to danger areas and provide ongoing improvements.

Such efforts to improve the working environment have earned a number of satisfactory comments from employees. MCP has also earned acclaim from the Thai government for its labor-management relations. In fact, in September 2005 the company won a company award for labor-management relations.

A Bridge Between Employees and Management

This is my first experience of being a manager of Thai employees. As I am responsible for general affairs in my current position, I take part in management. I also play a bridging role between local employees and Japanese managers, so I make my daily rounds of the plant and do my best to speak with as many employees as possible. Understanding their comments gives me strength. The role is nothing spectacular, but I believe that passing on employees’ comments to management is an important task. One of my major jobs is to communicate various aspects of employee welfare. One of the good things about MCP is that policies are clear, and disclosure to employees is excellent.

CHEADCHAI
Mitsubishi Electric Consumer Products (Thailand) Co., Ltd.
Protecting the Environment for Future Generations

The Mitsubishi Electric Group has carried out voluntary environmental initiatives systematized under our Environmental Plan since fiscal 1994. The Environmental Plan consists of a Core Environmental Policy, an Environmental Code of Conduct, an Environmental Management System to carry them out, and environmental targets centering on Materials, Energy, and Toxicity, which we refer to as “MET.”

Core Environmental Policy

The Mitsubishi Electric Group promotes sustainable development and is committed to protecting and restoring the global environment through technology, through all its business activities, and through the actions of its employees.

Environmental Code of Conduct

1) We assess the environmental impacts of our products and business activities, and strive to reduce these negative impacts by developing and introducing environmentally-sound technologies and processes.
2) We work through our business activities to help create a society with sound material cycles, by supporting efforts to better understand environmental issues, and by making use of technologies and information.
3) We establish environmental management systems at all of our works and operate them according to voluntary standards. We seek continuous improvement in our environmental management by conducting environmental audits and other efforts.
4) We educate, train and motivate employees to be good environmental stewards, and support and encourage activities that promote environmental protection.
5) We support communication and cooperation regarding environmental protection worldwide.

Materials refer to the efficient use of resources, Energy, to the efficient use of energy, and Toxicity, to reducing the use of substances potentially harmful to the environment. It is from these three perspectives that we work to reduce the negative environmental impact of our business activities. In order for our MET activities to blossom and bear fruit in the form of environmentally-beneficial technologies and products, we will conscientiously cultivate the tree of environmental management.
Commitment of the Environmental Executive Officer

Thoroughgoing Defense and New Proactive Initiatives for a More Evolved Harmony Between Economy and Environment

When I first started at Mitsubishi Electric, I was involved in the development of technology for processing sludge and wastewater. What bothered me at the time was the fact that the use of wastewater purification advanced, the more the waste that had been extracted from the water increased. I acutely perceived that wastewater purification technology could not be achieved without also being able to fully process the waste, and I learned that environmental businesses involved the accumulation of repeated efforts. Thereafter, I was involved in developing production technology and worked to improve productivity by reducing the unnecessary, the impossible and the irregular. I believe that all of these technologies and initiatives are necessary to minimize negative environmental impact in procurement, production, distribution and other business activities.

The Mitsubishi Electric Group started its 5th Environmental Plan in April 2006. The plan's target year is set at fiscal 2009, and its aim is to facilitate a more evolved harmony between environment and economy, which was initiated in the 4th Environmental Plan. To put it another way, the goal of the plan is to conduct thoroughgoing “defensive” measures and develop new “proactive” initiatives.

Under the 4th Environmental Plan, which covered from fiscal 2004 to fiscal 2006, we tackled a number of issues. These included ensuring full compliance with the law, broadly incorporating environmental considerations into factories, products and distribution, and creating new businesses that contribute to the environment. Our efforts were successful in a number of areas, including training the next generation of environmental managers and increasing the proportion of eco-products.

Under the 5th Environmental Plan, we will enhance environmental management on a global, consolidated basis and work to improve environmental performance down the entire supply chain. By doing so, we plan to further strengthen a form of management that balances the three perspectives of growth, profitability and efficiency, and soundness.

With respect to an issue that affects us all, the problem of global warming, we have put forth a goal of reducing carbon dioxide emissions (per unit of net sales) by 25% by fiscal 2011, compared to fiscal 1991 levels. As of the end of fiscal 2006, we have reduced emissions by 22%, thus being able to achieve the final 5% reduction presents a major challenge. The 5th Environmental Plan makes achievement of this target a major agenda. It also calls for ongoing investment in energy-saving measures, with a goal of 0.1% of production value, and to steadily take steps to make energy loss readily apparent (see pg. 41). In addition, the technologies and expertise we accumulate in the process of achieving these goals will be incorporated into products and services, and presented to customers in the form of environmental solutions, in order to expand our environmental businesses and thereby contribute to society.

My part in successfully carrying out these plans will be to clarify our policies from the top down and raise awareness of them while facilitating ongoing, self-directed improvements by all employees.

We must strengthen our management capacities so as to be able to engage in production while reducing environmental impact. There is no shortcut to this goal. We will take steady steps, one at a time, to achieve it.

5th Environmental Plan Overview

1 Enhancing Environmental Management on a Global, Consolidated Basis and Fulfiling Corporate Social Responsibilities

Thoroughgoing Defense

- Comply with laws and regulations, and ensure thoroughgoing management to this end
- Incorporate the core business processes of each business group—product development, manufacturing, sales, etc.—into the environmental management system (ISO 14001:2004) and carry out improvement activities
- Double the number of key environmental personnel (employees directly involved in environmental issues) by enhancing training programs
- Strengthen preventative maintenance measures by revamping environmental facilities

2 Improving Environmental Performance Together with Stakeholders

Defensive and Proactive Measures

- Strengthen initiatives down the entire supply chain, from development and design to procurement, production, delivery and waste
- Continue investing in energy efficiency with a goal of 0.1% of production value and reduce carbon dioxide emissions by 25% by fiscal 2011 (compared to fiscal 1991) by making energy loss readily apparent
- Construct an internal certification system for eco-factories and eco-offices by developing guidelines for them

3 Enhancing Environmentally Beneficial Businesses

Developing New Offensive Initiatives

- Instill Mitsubishi Electric eco-products at the company, and leverage the acquired know-how and energy conservation in environmentally-beneficial businesses (expand environmentally-beneficial businesses to ¥100 billion by fiscal 2011 while putting global markets into consideration)
Environmental Management

Project Report  Head Office and Branch Offices Transition to ISO 14001: 2004

Going Beyond Paper Reduction, Waste Management and Energy Savings

Integrating Our Environmental Management System into Core Business Processes at the Head Office and Branch Offices

Fully Rebuilding Our Environmental Management System

The head office of Mitsubishi Electric acquired ISO 14001 certification for environmental management systems on March 20, 2003. Certification was extended in 2004 to encompass branch offices throughout Japan. As three years has now passed since certification, 2006 marks the year we undergo a renewal audit and transition to the 2004 version of ISO 14001. We therefore considered ways of going about meeting the requirements of the new standards and concluded that we would reconfirm the suitability and effectiveness of the environmental management system we have used for a number of decades, rather than give the system a major facelift.

The General Affairs Department has traditionally handled ISO administration for the head office and branch offices. ISO activities have encompassed our core business activities, but much of our focus was placed on initiatives at the office; that is, making improvements in the areas of paper reduction, waste management and energy savings. At the same time, environmental considerations and compliance management related to product development, production and sales, which Mitsubishi Electric, as a manufacturer, has been involved in from early on, was handled by the Corporate Environmental Sustainability Group. Taking advantage of this opportunity, we decided to extend the scope of ISO application from office activities to include Group supervisory functions, and to integrate ISO activities with the Mitsubishi Electric Group Environmental Plan. The administrative office for these activities was moved to the Corporate Environmental Sustainability Group in order to utilize the environmental management system as a tool for more efficiently advancing core business processes, and in order to more efficiently carry out ISO activities themselves. A dedicated team was established and preparations were made to complete the move by October 1, 2005.

Decision Not to Create Documents for the Renewal Audit

Ahead of the renewal audit for ISO 14001: 2004, Takashi Yoshida, General Manager for the Corporate Environmental Sustainability Group, made the decision not to prepare documents for the audit. Mitsubishi Electric has engaged in environmental management for 15 years, its management mechanisms are functioning, and it continues to make improvements. Internal audits do not stop at ISO requirements, but are periodically carried out on the basis of wide-ranging voluntary auditing standards. Yoshida held that the company should organize its everyday environmental management practices in light of the requirements of ISO 14001: 2004 and not create systems in accordance with the requirements that depart from the company’s normal state of affairs just for the sake of the audit. “If there are areas that do not meet the requirements,” he commented, “then we will improve them.”

Initially some staff members of the administrative office wondered if it would really be possible to pass the audit in this way. They were worried about their ability to convince the ISO auditors. But Yoshida, the foremost figure in the area of environmental ISO standards in Japan, and his clear vision gradually won over support.

Employees Involved in Core Business Processes Play a Leading Role

We decided on an approach involving undergoing the audit by explaining the situation at the company as it stands. Environmental manuals were positioned as the interface between company rules and ISO regulations. For this reason, it was necessary to revise our manuals. Previously, we had put our focus on office activities, and there was therefore a common manual for the head office and branch offices. However, to highlight the respective core business activities of head office divisions and branch offices, we separated the manual into one for the head office, which is involved
in supervision, and one for the branch offices, which are involved in operations. The head office manual was completed following repeated revisions that produced 16 different drafts. Many discussions were also held to acquire the consent of the certification institution for not creating documents for the audit, but rather undergoing the audit on the basis of the manual. At the same time, we worked on editing the branch office manual while applying the know-how we acquired in creating the head office version. Thereafter, we held presentations at our 10 branch offices nationwide as well as sessions for reading the manual. Efforts were made to ensure the full understanding of all employees by explaining which daily activities corresponded to which parts of ISO 14001: 2004 requirements for each and every person. At the presentations, a variety of opinions were offered, some expressing the frustration that it was easier to understand and follow when the focus was just on paper, garbage and electricity, or wondering why another manual was necessary since the negative environmental impact of branch offices is minimal. In response, administrative staff members persistently appealed to the fact that, because branch offices and divisions support the company’s core business activities, they should by nature be leading players in environmental conservation.

**Topics : Shikoku Branch Office**

A Unique Goal for Core Business Activities

When efforts were being made to reconcile current business activities with the environmental manual for branch offices in conjunction with the transition to ISO 14001: 2004, members of the Shikoku Branch Office noticed that the manual was really no different from what they were already doing. The branch started the Shikoku Genki Project in August 2003, and has been actively working to strengthen and enhance energy-saving businesses in partnership with affiliates. It is precisely for this reason that targets for the branch’s core business activities are one and the same with the targets for its environmental initiatives, which is a significant motivating force for employees. This has led the branch to set the unique goal of achieving a certain number of customer visits for the purpose of proposing energy-saving solutions.

Energy-saving renovations at the city hall of Uwajimashi also represent success in expanding the energy conservation business. The photo shows a pamphlet that describes the renovations.

**Topics : Chugoku Branch Office, Okayama Branch**

Reconfirming the Significance of Expanding Sales of Photovoltaic Power Generation Systems

The Okayama region enjoys a high percentage of clear, sunny days, so the branch has focused on expanding sales of photovoltaic power generation systems since fiscal 2005. Environmental activities are therefore rooted in the branch’s core business activities, so the new environmental manual for branch offices that complies with the requirements of ISO 14001: 2004 easily penetrated the mindset of the branch’s employees. The branch as a whole reconfirmed the significance of selling the systems.

During the renewal audit in February 2006, the fact that even staff members who handled other products could explain the characteristics of photovoltaic power generation impressed the auditors. Sales staff propose photovoltaic power generation while administrative staff promote paper, garbage and electricity reduction activities in core business processes. This approach has become firmly entrenched at the Okayama Branch.

Promotion team members

Making posters, sorting garbage and recycling

**Looking Back on the Project**

We are currently carrying out our Environmental Plan under an environmental management system that encompasses the Mitsubishi Electric Group. With our past ISO activities at the head office and branch offices, we did take up core business activities, but the link between our environmental management system and the Group’s Environmental Plan was not very clear. If we had decided to comply only with the 2004 certification requirements, I think we could have done so by making minor adjustments to our previous system. However, the intent of ISO 14001 lies in the company’s management itself and in integrating environmental activities into everyday practices. Our system revamp was not limited to office activities in buildings with the head office and branch offices environmental management system, but rather was positioned to encompass supervisory activities for the system throughout the Group. The administrative team seemed somewhat concerned about this concept at first, but they successfully gave tangible form to my vision.

Takashi Yoshida
General Manager, Corporate Environmental Sustainability Group
4th Environmental Plan Targets and Fiscal 2006 Achievements

Fiscal 2006 was the final year of the 4th Environmental Plan. We achieved 24 of 27 targets, and clarified issues and agendas for the future. We intend to continue to carry out environmental measures in every aspect of our business activities.

Overview of Activities in Fiscal 2006
One of our achievements this past year was to successfully strengthen environmental management on a global scale for the Group as a whole. In updating our environmental management system to ISO 14001:2004, we rebuilt our administrative structure. We also continued to hold regional environmental conferences overseas that we had started in fiscal 2005, and made further progress in shoring up our environmental management foundations. Training of key environmental personnel entered its second year, and there are now 46 such personnel working actively on the front lines. Progress was also made in reducing the environmental impact of our products, as the eco-products sales ratio climbed to 74%. We also achieved our targets for energy conservation and the reduction of chemical substances.

One issue that remains, however, is reducing the amount of waste we generate. We failed to achieve our targets for final disposal ratio and waste discharged per unit of sales at domestic affiliates. Going forward, we plan to further strengthen reuse and recycling initiatives.

Formulating the 5th Environmental Plan Ending Fiscal 2009
Our 5th Environmental Plan has been drawn up around several basic issues: enhancement of environmental management on a global, consolidated basis, improvement in environmental performance, expansion of environmentally beneficial businesses (eco-products and eco-services), and awareness-raising, action and communication from a CSR standpoint. Based on the foundation built under the 4th Environmental Plan, we intend to put both “defensive” and “proactive” measures into effect.

Environmental Management

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Item</th>
<th>Target for FY2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, Environmental Business, Communications</td>
<td>Strengthen the basis for globally integrated environmental management</td>
<td>Hold regular meetings of environmental committees in every company region (Europe, Americas, Asia, China).</td>
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<tr>
<td></td>
<td>Promote environmental awareness and enhance competence</td>
<td>Train successors of current practitioners at works by conducting “next-generation key environmental personnel training.”</td>
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<td></td>
<td>Conduct environmental auditing conducted by experienced personnel with strong administrative skills.</td>
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<tr>
<td>Creation of Environmentally Beneficial Businesses</td>
<td>Contribute through environmental business activities</td>
<td>Promote environment and energy solutions projects.</td>
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<tr>
<td></td>
<td></td>
<td>Create conservation and recycling-based business models.</td>
</tr>
<tr>
<td>Environmental Communication</td>
<td>Communications with stakeholders</td>
<td>Enhance disclosure of environmental information.</td>
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<td></td>
<td>Improve environmental management by incorporating the opinions of outside experts.</td>
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<td></td>
<td></td>
<td>Enhance environmental communication with local communities.</td>
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<td></td>
<td></td>
<td>Hold or participate in various environmental exhibitions.</td>
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</table>

Eco-Products Initiatives at the Procurement/Product Use/Recycling Level

| Promotion of green procurement   | Continue promoting green procurement in partnership with suppliers  |
|                                  |                                                                  |
|                                  | Reduce ratio of Eco-Products to at least 70% of production value  |
|                                  |                                                                   |
| Reducing the negative environmental impacts of products | Create advanced environmentally efficient products (“Hyper Eco-Products”). |
|                                  | Complete elimination of HCFC*1                                    |
|                                  | Eliminate the use of HCFC*1 as a foaming agent by the end of FY2005 |
|                                  | Eliminate the use of HCFC*1 as a refrigerant by the end of FY2011 |

Addressing extended producers responsibility

| Eliminate the use of six substances suspected of being environmental hazards | Eliminate the use of six substances suspected of being environmental hazards | Mitsubishi Electric: Reduced by 2% from FY1999, 25% in FY2009. |
|                                                                           |                                                                        |

Eco-Factories Initiatives at the Manufacturing Level

| Effective use of resources | Promote “zero emissions” (control final disposal volume to below 1% of total waste emissions) | Control final disposal volume to below 1% of total waste emissions |
|                           | Reduce volume of waste generated | Reduce volume of waste generated by 6% from FY2003 |
| Energy conservation       | Reduce carbon dioxide emissions | Mitsubishi Electric: Reduce by over 1.5% per year. |
|                           | Reduce chemical substance emissions | Reduce chemical substance emissions by over 15% from FY2003 |
|                           | Reduce emissions of ozone-depleting substances and greenhouse gases | Reduce emissions of ozone-depleting substances and greenhouse gases |
|                           | Reduce total emissions by over 18% from FY2003 | Mitsubishi Electric: Reduce by 23% (emissions of 76,000 tons-CO2) |

Eco-Logistics Initiatives at the Transport/Logistics Level

| Reduction in the negative environmental impacts of transportation | Reduce CO2 emissions | Mitsubishi Electric: Established elemental “Design for Environment” (DFE) technology. |
| Reduction in the negative environmental impacts of packaging | Reduce the volume of packaging materials used | Reduce the volume of packaging materials used by 10% from FY2002 |

Notes:
*1 HCFC: Hydrochlorofluorocarbons *2 HFC: Hydrofluorocarbons
Fiscal 2006 was the final year of the 4th Environmental Plan. We achieved 24 of 27 targets, and the environmental management ratio climbed to 74%. We also achieved our enhancement of environmental management on a global, consolidated basis. Progress was also made in regional environmental conferences and organizations subject to auditing.

One issue that remains, however, is the need for further improvement in the areas of release control and environmental management administration, particularly in the areas of environmental protection and conduct.

Strengthen preventative protection in connection with the environment.

Expand environmental businesses.

Hold dialogues with diverse groups of stakeholders and maintain channels of communication.

Enhance dialogue and collaboration.

Foster employees who voluntarily engage in environmental protection.

Publish Environmental Sustainability Report with more reporting on social and environmental activities.

Establish Eco-Products International Fair overseas in addition to domestic environmental exhibitions.

Established "Environment Week", a private exhibition.

Conducted environment-themed corporate advertising in Japan and abroad.

Worked for strict compliance with RoHS and other laws and expanded green procurement.

Mitsubishi Electric: Established element "Design for Environment" (DFE) technology and achieved an eco-products ratio of 20% by the end of FY2006.

Mitsubishi Electric: Created a total of 56 products in a broad range of fields, including energy and electric systems, industrial automation systems, information and communication systems, and home appliances.

Applied "closed loop recycling" to a wide array of products, which involves using recycled plastics recovered from used home appliances in new home appliances, including air conditioners, washing machines and refrigerators.

Currently applying energy-efficient design to home appliance product groups. Received various awards for energy-efficient products (including the Energy Conservation Award, Corporate President's Award from the Energy Conservation for a room air conditioner, MSZ-ZW40TS).

Completely eliminated HCFC by the end of FY2005 (achieved).

Continuing to switch to HFCs for major air conditioner models. Refrigerants for the Japanese market, completed the conversion from HCFC-22 to HCFC-123 (HCFC-free) refrigerants by the end of FY2005.

Continuing to build a system to comply with the WEEE Directive at optimal cost by harnessing our expertise in home appliance recycling.

Products destined for the EU made compliant and Continuously working on efforts to reduce the risk of contamination by regulated substances in these products.

Mitsubishi Electric: 0.31% (achieved zero emissions four years in a row)

Affiliates and subsidiaries in Japan: 2.4%

Japan*: up 8% from FY2003 (flat year-on-year)

Mitsubishi Electric: Emissions ratio of 2.5% 2 emissions

Mitsubishi Electric: Reduced by 23% (emissions of 76,000 tons-CO₂) Japan*: Reduced by 17% (emissions of 103,000 tons-CO₂)

Mitsubishi Electric: Reduced by 41% from FY2003 (99,000 tons-CO₂) Japan*: Reduced by 30% from FY2002 (97,500 tons-CO₂)
Promoting Environmental Management

Environmental management is promoted throughout the Group on a global basis by constructing and implementing an environmental management system that encompasses all Group companies, and through active communication among environmental managers in Japan and overseas.

Ongoing Improvement in Environmental Management Through Three-Year Environmental Plans

The Mitsubishi Electric Group formulates its Environmental Plan in three-year intervals, taking into account its record of environmental performance, changes in societal and market conditions related to the environment in Japan and overseas, and corresponding changes in organizational structures and business strategies. In fiscal 2006, our 4th Environmental Plan was concluded and in fiscal 2007, we are starting our 5th Environmental Plan.

With regard to important issues for each fiscal year, basic policies and agendas are clarified at the Corporate Environmental Managers’ Meeting, then each business group, works, research center, branch office, and affiliate and subsidiary formulate and carry out implementation plans in line with the characteristics of its respective business activities.

Rebuilding the Management System with the Switchover to ISO 14001:2004

Up to our 4th Environmental Plan (FY2004 – FY2006), we used a dual layer system of environmental management that consisted of the management of the overall Group, and the management of the production facilities, including affiliated companies. Each has its own management cycle but stays linked with the other. Environmental activities were carried out for the overall Group.

With our 5th Environmental Plan, we took advantage of the opportunity afforded by updating to ISO 14001:2004 to completely integrate management systems for the head office, works, research centers, branch offices, and domestic and overseas affiliates. The scope of management was also extended to include offices and non-production sites, so that now Group environmental management is carried out for all traditional corporate activities; that is, product development, manufacturing and sales.

Strengthening Overall Group Environmental Management on a Global Basis

The Group has held meetings of Regional Environmental Committees since fiscal 2005 in order to strengthen the foundation for environmental management on a global basis. Committee meetings are held in four regions around the world, and are attended by environmental managers and administrators inside and outside of Japan. They serve to deepen understanding of environmental policies throughout the Group, facilitate communication to raise environmental awareness, and improve the level of environmental management in each region (compliance, systems and implementation).

In fiscal 2006, Regional Environmental Committees were convened in China, the Netherlands and Thailand*. Committee members confirmed issues in each region pertaining to the RoHS Directive as well as the direction of related initiatives, exchanged updated information on environmental management, and shared know-how with one another. Starting in fiscal 2007, we plan to extend environmental audits to factories overseas and thereby further strengthen the foundation for global environmental management.

* For scheduling reasons, the committee meeting for the Americas region was moved to August 2006, resulting in meetings being held in three regions in fiscal 2006.
Environmental Audits

Internal environmental audits are conducted along with other rigorous checks in order to raise the overall level of environmental management. We are involved in an ongoing cycle of discovering problems and making improvements.

Strengthening Checks with Three Types of Audits

The Mitsubishi Electric Group uses three types of audits to improve the overall level of its environmental management. First, there are audits to check the conformity of our environmental management systems, done by ISO 14001 certification bodies.

Secondly, works and affiliated companies use independent internal audits to verify regulatory compliance and ISO requirements.

Thirdly, apart from these audits, the Corporate Environmental Sustainability Group spearheads environmental audits on all domestic branch offices, works and affiliated companies in the Mitsubishi Electric Group. They are conducted once every two years at branch offices and manufacturing works, and annually at affiliate companies.

The audit teams are made up of qualified individuals in areas such as the prevention of pollution, waste management, energy management, and high-pressure gases. The results of the audits are reported by the environmental executive officer to the President, and are conveyed to Group works and affiliates through the Corporate Environmental Managers Meeting, reports and other avenues. This in turn helps the works to improve the quality of their environmental management. Under the 5th Environmental Plan, we plan to progressively extend environmental auditing to manufacturing sites overseas.

Fiscal 2006 Environmental Auditing Results and Issues

Environmental auditing by the Corporate Environmental Sustainability Group involves interviews with management at works and affiliated companies and checking on a variety of matters that include legal compliance and environmental risk management, which encompasses disaster prevention and safety at worksites, the handling of chemical substances in connection with products and manufacturing, product assessments, and the effectiveness of internal audits.

In fiscal 2006, 110 audits were conducted, just as scheduled, and measures were taken during the year at works where the audits turned up instances of nonconformance. Going forward, we will continue to take steps to prevent recurrence, check for similar cases based on this information at business sites throughout the Group, and horizontally develop measures to prevent recurrence.

Comments from an Internal Auditor

Obtaining the latest information and acquiring the right knowledge are indispensable to carrying out proper audits.

I have worked as an internal environmental auditor since 1996. I have also participated in other internal audits of works since fiscal 2001 and of Group affiliated companies since fiscal 2006.

Environmental audits are not necessarily for the purpose of discovering nonconformance but for checking whether or not the potential exists for nonconformance to occur. The Group’s level of environmental management increases every year, and progress is being made in preventing environmental accidents and reducing risk. Unfortunately, despite this, last year we found insufficiencies in the management of waste processing contracts and manifests exchanged when contracting waste services.

To conduct appropriate audits within a limited amount of time, it is important that we go over information from the audited division or company in advance so as to ensure important matters are not overlooked. In particular, since environmental auditing puts substantial weight on legal compliance, we constantly work to acquire the latest information on new or amended laws and regulations at the national level, and ordinances at the local level. We check with the government when there are any uncertainties in how to interpret the law.

We will continue to hone our knowledge and abilities to be able to carry out audits properly. We will also try to ensure that the knowledge we acquire through auditing is conveyed to all relevant parties.
Training Personnel to Improve the Quality of Environmental Management

We are currently training key environmental personnel on a company-wide basis to handle the actual work involved in environmental management, as well as auditors to carry out responsible auditing in order to further develop environmental management activities at a high level into the future.

Firmly Establishing Training for Environmental Key-Persons

Many veteran employees (including those certified as Environmental Pollution Control Administrators) who successfully overcame the pollution problems of the 1970’s and have provided environmental management for their worksites up through the present will be retiring in the next one to two years. The shortage of successors to these environmental managers and administrators is a problem plaguing Japanese industry as a whole.

The Mitsubishi Electric Group has conducted intensive education programs since fiscal 2005 to train the next generation key environmental personnel, who will inherit expert-level technical skills and experience, and promote environmental management activities. Veteran employees who have handled the actual work of managing pollution and waste serve as teachers at the training sessions. The sessions provide practical instruction to young employees in their twenties and thirties selected from around the factories in Japan, and the curriculum is taught through group discussions, presentations, role playing and other pedagogical techniques.

In the two-year period to the present, all 46 participants in the program have passed the final exam and they are already directly involved in environmental management at our works and affiliated companies. We plan to train 100 key personnel by fiscal 2009 to provide the competence that is required to maintain and carry out our environmental management system.

Promoting Environmental Education with Training by Job Type and E-Learning

The Mitsubishi Electric Group works to raise awareness through Eco-News, a periodical aimed at cultivating an environmental mindset in all employees. We also conduct training based on job type for engineering, administration, sales, management and overseas employees.

For highly specialized areas in particular, we run intensive education programs and provide learning opportunities through e-learning on topics including environmental management to comply with ISO 14001 and procedures for environmental auditing. E-learning allows employees, even those at affiliates, to take classes via intranet, which helps enhance environmental education for the Group as a whole.

Recruiting Auditors Capable of Carrying Out Stringent, Responsible Audits

Having environment-related certifications or being certified as an auditor is not a sufficient condition for being an environmental auditor. Employees that have met requirements established by company regulations participate in multiple audits, and on this basis we judge their suitability for the role of auditor, which includes assessing their knowledge, auditing skills and personal characteristics.

In addition, auditors are not just involved in auditing work; they are also responsible for running various training programs to train and raise the skill level of internal auditors at our manufacturing works. They are further involved in developing environmental standards, guidelines, case studies and other documents, and use our intranet to convey this information throughout the Group.

Key Environmental Personnel Curriculum and Acquired Skills

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<thead>
<tr>
<th>Curriculum</th>
<th>Features</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation of legal requirements (basic knowledge and application)</td>
<td>Experiences to date and necessary knowledge are taught by teachers within the company</td>
<td>Ability to understand the legal requirements of environment-related laws and regulations, and explain them to others</td>
</tr>
<tr>
<td>Identification of risks related to environmental facilities and formulation of improvement measures</td>
<td>Management know-how is taught using past accidents and incidents as case studies</td>
<td>Ability to discover and resolve potential environmental risks at worksites before they materialize</td>
</tr>
<tr>
<td>Practice of internal auditing</td>
<td>Onsite inspections and compliance audits are practiced</td>
<td>Ability to conduct audits with knowledge and experience in environment-related laws and regulations</td>
</tr>
</tbody>
</table>

Comments from a Graduate of the Training Program for Environmental Key-Persons

Developing an acute sense for even minimal environmental risks

I also came to fully internalize the knowledge I had in my head through simulated experiences.

What was most impressionable was participating as an observer in a risk communication session held between Nakatsugawa Works and local community members. I learned that it is exceptionally difficult to get people with strong concerns over the impact of factory wastewater to understand the company’s initiatives in this area. I experienced firsthand that heavy responsibility of being involved in environmental measures and the importance of steady, everyday activities.

Having passed the final exam, I now want to hone my sensibility as an environmental leader at my worksite so that I can sensitively respond to even the smallest environmental risk.
Eliminating Negative Legacies and Adopting Preventive Measures

We are committed to the early discovery of potential environmental contamination through environmental assessments and work to make risks readily apparent. We also proactively conduct risk communication activities with local community members.

Eliminating Negative Legacies—Responding to Groundwater and Soil Contamination

Groundwater and soil contamination was confirmed by voluntary inspections conducted from 1998 to 2000 and environmental assessments based on company regulations in 12 districts associated with the Mitsubishi Electric Group. In line with conditions in those areas, we are currently implementing cleanup measures that include pumping, ozone degradation, soil vapor extraction, activated carbon absorption and soil replacement.

When altering, selling or buying land in use, we conduct environmental assessments on it, which include inspections of documents and various analyses. In addition, when contamination is discovered or a chemical leak occurs, we immediately report the incident to government authorities. We have also established rules for carrying out cleanup activities and other measures.

In order to prevent the kind of discharge accidents that lead to environmental contamination, we are working to make problems readily apparent and develop other activities before they occur.

Proper PCB Storage and Treatment

On our website, we post a list of electronic devices that were manufactured by the Group in the past using PCB (polychlorinated biphenyls) so that customers can check on them. We are also active partners in PCB treatment activities, providing information on device structures and dispatching engineers to the Japan Environmental Safety Corporation, which handles the treatment of PCB.

In addition, for PCB waste stored by the company and devices containing PCB still in use, we conduct inspections and checks at least once a year at each of our works. Going forward, we plan to continue to conduct proper storage and management as well as initiate measures in fiscal 2007 to complete treatment by 2010.

Responding to the Detection of Low-Concentration PCB in Transformers

With regard to the possibility that transformers and other devices were contaminated by small amounts of PCB, Mitsubishi Electric considered the possibility of contamination during the manufacturing process, in the devices following delivery, and in the insulating oil. We came to the conclusion that although the cause cannot be elucidated, and the devices and manufacturing years cannot be identified, we are unable to deny the possibility that small amounts of PCB are contained in electrical devices that used electrical insulating oil in their manufacture prior to 1989. We determined that products manufactured since 1990 were not contaminated by low-concentration PCB during manufacturing or shipping due to strong quality management for insulating oil.

We intend to continue managing quality for insulating oil and respond to individual cases through a customer service desk that has already been set up. We will also work to provide technical information. Moreover, we plan to actively cooperate in planning related to the treatment of materials contaminated with low-concentration PCB.

Making Problems Readily Apparent to Prevent Environmental Accidents (Air Conditioning and Refrigeration Systems Works)

In order to prevent accidents involving the discharge of environmentally harmful substances, it is first important to recognize problems when they exist. At our Air Conditioning and Refrigeration Systems Works, we have had some success by developing activities to make problems readily apparent. One such activity involves highlighting water discharge routes.

In order to know what type of discharged water flows into which ditches and pits, we made it possible to trace water routes by labeling them as problematic wastewater, rainwater, and specific wastewater. This revealed the fact that there are rainwater pits that flow directly into a river immediately beside an oil storage facility. We are currently raising the sides of the pits and installing cutoff devices at the end of ditches, as well as making it possible for anyone to monitor the situation by clarifying control standards for monitoring.

Importance of Ongoing Risk Communication (Nakatsugawa Works)

In December 2005, an event for communicating environmental risks was held by Gifu Prefecture at our Nakatsugawa Works. It was the third such event and involved a factory tour followed by a meeting where local community members, government officials and members of non-profit organizations could discuss issues with one another. There were questions about the operating status of our environmental facilities and our response in the event of abnormalities. With regard to wastewater treatment, one person suggested raising carp in water discharged from the plant. Overall the event confirmed the height of concern over the environment. We also received some praise, with one person commenting that the paint smell he had noticed in the past on a factory tour was gone. We intend to continue this kind of dialogue with as many people as possible in order to build a high degree of trust with local communities and concerned citizens.
Mitsubishi Electric has instituted an environmental accounting system to raise the efficiency of environmental activities and facilitate ongoing improvement. We allocate management resources to environmental activities and disclose information on the benefits of those activities.

Scope and Period of Data Compilation

- **Period**: April 1, 2005 – March 31, 2006
- **Scope of Data Compilation**: Mitsubishi Electric Corporation and 50 of its domestic and overseas affiliates and subsidiaries (29 domestic, 21 overseas)

Method of Disclosure

- We calculate environmental protection costs and benefits for Mitsubishi Electric and the Group as a whole. The information is disclosed in accordance with environmental reporting guidelines issued by Japan’s Ministry of the Environment.
- The benefits of environmental protection are ascertained quantitatively, in terms of real benefits, which consist of earnings (from selling recycled valuables) and savings (from conserving energy and resources), and in terms of estimated benefits.
- The estimated benefits we report consist of economic benefits to customers who purchase energy-efficient products, such as lower electric bills, and benefits to customers from environmental improvement.

Policy on Utilizing Environmental Accounting

The Mitsubishi Electric Group utilizes environmental accounting data to track environmental-related investment, costs and benefits, and to promote more effective environmental protection activities. Estimated benefits are also calculated and reported in order to help evaluate how much our environmental protection initiatives economically benefit society, and not only the company.

Going forward, we plan to report information that makes the relationships between environmental protection costs and benefits easy to understand for each policy established under our 5th Environmental Plan. In addition, we will raise the precision of internal management by selecting data that is effective in promoting environmental activities, and will further utilize environmental accounting data in each business group.

### Overview of Fiscal 2006

The Mitsubishi Electric Group made capital investments totaling 3.87 billion yen (580 million yen less than last year), centering on measures for helping prevent global warming, reducing chemical substances and preventing air pollution. These measures included actively installing a broad range of high-efficiency equipment at Industrial Automation Systems factories and research centers, ramping up production to meet growing demand for heat-pump type hot-water supply systems, which exert a lower negative environmental impact than typical heater-type models, introducing low-emissions vehicles for transportation, and increasing the energy efficiency of forklifts and production lines. The amount we invested decreased because there was less installation of lead-free lines (compliant with the RoHS Directive), which accounted for considerable capital investment last year. Costs, however, were 12.98 billion yen (2.14 billion yen more than last year). This was largely due to increases in the cost of procuring RoHS-compliant parts and materials, analysis and assessment expenditures, development costs for RoHS-compliant products, and personnel expenses. There was also an increase in research and development expenditures, which centered on next-generation technologies related to new energy and energy conservation. We tackled energy efficiency in a broad array of product categories, from household to industrial, and generated estimated economic benefits of 76.33 billion yen, in the form of lower electricity bills when the products were being used, for example. The real economic benefits of our environmental protection activities were 4.25 billion yen.

### Environmental Protection Costs and Economic Benefits from Environmental Protection Activities (Mitsubishi Electric Group)

- **Period** 2001-2006 economic benefits are only real benefits (100 million yen)

<table>
<thead>
<tr>
<th>Year</th>
<th>Environmental Protection Costs</th>
<th>Earnings/Savings Benefits = Real Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>168</td>
<td>168</td>
</tr>
<tr>
<td>2002</td>
<td>157</td>
<td>136</td>
</tr>
<tr>
<td>2003</td>
<td>136</td>
<td>153</td>
</tr>
<tr>
<td>2004</td>
<td>153</td>
<td>168</td>
</tr>
<tr>
<td>2005</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>157</td>
<td></td>
</tr>
</tbody>
</table>

### Environmental Protection Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
<th>Year-on-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Investment</td>
<td>28.9</td>
<td>15.1</td>
<td>50.9</td>
<td>33.9</td>
<td>79.8</td>
<td>49.1</td>
<td>153</td>
<td>-3.4</td>
</tr>
<tr>
<td>Costs</td>
<td>9.5</td>
<td>3.0</td>
<td>19.1</td>
<td>13.0</td>
<td>28.6</td>
<td>16.0</td>
<td>23</td>
<td>-4.2</td>
</tr>
<tr>
<td>Total</td>
<td>38.4</td>
<td>18.1</td>
<td>69.9</td>
<td>46.9</td>
<td>108.4</td>
<td>35.1</td>
<td>173</td>
<td>-3.4</td>
</tr>
</tbody>
</table>

### Environmental Protection Benefits

<table>
<thead>
<tr>
<th>Item</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
<th>Year-on-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings</td>
<td>1,465</td>
<td>1,040</td>
<td>51</td>
<td>35</td>
<td>51</td>
<td>35</td>
<td>1,465</td>
<td>-58</td>
</tr>
<tr>
<td>Savings</td>
<td>911</td>
<td>675</td>
<td>8</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>911</td>
<td>-58</td>
</tr>
<tr>
<td>Net Benefits</td>
<td>552</td>
<td>524</td>
<td>102</td>
<td>122</td>
<td>102</td>
<td>102</td>
<td>552</td>
<td>-58</td>
</tr>
<tr>
<td>Capital Investment</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>10,000 GJ</td>
<td>-2%</td>
</tr>
<tr>
<td>Total</td>
<td>1,467</td>
<td>1,040</td>
<td>51</td>
<td>35</td>
<td>51</td>
<td>35</td>
<td>1,465</td>
<td>-2%</td>
</tr>
</tbody>
</table>

### Environmental Protection Activities

- **Period**: Fiscal 2006
- **Year-on-Year Change**: -58%
- **Percentage of Increase in Annual Earnings**: -30%

### Recycling Information

- **Units**: Mitsubishi Electric Group and Mitsubishi Electric (100 million yen)
Environmental Impact Throughout Product Lifecycles

In order to create a recycling-based society and reduce environmental risk, Mitsubishi Electric tracks overall environmental impact throughout product lifecycles—from materials procurement to transport, use, collection and recycling—and uses this information in devising effective measures and activities.

### Materials for Manufacturing

<table>
<thead>
<tr>
<th></th>
<th>Mitsubishi Electric</th>
<th>Affiliates (Japan)</th>
<th>Affiliates (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>373,000 tons</td>
<td>95,000 tons</td>
<td>124,000 tons</td>
</tr>
<tr>
<td>LPG</td>
<td>2,510 tons</td>
<td>4,340 tons</td>
<td>1,520 tons</td>
</tr>
<tr>
<td>Oil (crude oil equivalent)</td>
<td>7,470 kL</td>
<td>8,880 kL</td>
<td>1,870 kL</td>
</tr>
<tr>
<td>Surface water</td>
<td>2,170,000 m³</td>
<td>650,000 m³</td>
<td>390,000 m³</td>
</tr>
<tr>
<td>Industrial water</td>
<td>2,480,000 m³</td>
<td>460,000 m³</td>
<td>1,000,000 m³</td>
</tr>
<tr>
<td>Underground water</td>
<td>2,960,000 m³</td>
<td>1,260,000 m³</td>
<td>1,000,000 m³</td>
</tr>
<tr>
<td>Others</td>
<td>0 m³</td>
<td>0 m³</td>
<td>130,000 m³</td>
</tr>
<tr>
<td>Controlled chemical substances (amounts handled)</td>
<td>4,550.8 tons</td>
<td>1,583.6 tons</td>
<td>1,000 tons</td>
</tr>
<tr>
<td>Ozone-depleting substances (amounts handled)</td>
<td>184.2 tons</td>
<td>106.0 tons</td>
<td>648 tons</td>
</tr>
<tr>
<td>Greenhouse gases (amounts handled)</td>
<td>3,029.8 tons</td>
<td>42.1 tons</td>
<td>43 tons</td>
</tr>
<tr>
<td>Volatile Organic Compounds (amounts handled)</td>
<td>723.0 tons</td>
<td>748.1 tons</td>
<td>53 tons</td>
</tr>
</tbody>
</table>

*1 Includes Mitsubishi Electric Corporation’s production facilities in Japan, 62 affiliates in Japan, and 23 affiliates overseas.
*2 Total of shipping weight of Eco-Products, plus product packaging plus waste disposal.
*3 Includes 11 sales companies.
*4 Total CO2 emissions arising from annual electrical consumption of Eco-Products.
*5 Weight of products taken back and weight of recovered resources of four types of appliances subject to Japan’s Home Appliance Recycling Law, plus personal computers.

### Selling and Distribution

<table>
<thead>
<tr>
<th></th>
<th>Mitsubishi Electric</th>
<th>Affiliates (Japan)</th>
<th>Affiliates (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel for trucks (gasoline)</td>
<td>114 kL</td>
<td>5,717 kL</td>
<td>12 kL</td>
</tr>
<tr>
<td>Fuel for trucks (diesel)</td>
<td>27,243 kL</td>
<td>4,573 kL</td>
<td>5,326 kL</td>
</tr>
<tr>
<td>Fuel for rail (electricity)</td>
<td>1,871 MWh</td>
<td>483 MWh</td>
<td>0 MWh</td>
</tr>
<tr>
<td>Fuel for marine transport (turbo)</td>
<td>769 kL</td>
<td>114 kL</td>
<td>1,714 kL</td>
</tr>
<tr>
<td>Fuel for air transport (jet fuel)</td>
<td>485 kL</td>
<td>352 kL</td>
<td>4,828 kL</td>
</tr>
</tbody>
</table>

### Energy Consumption

<table>
<thead>
<tr>
<th></th>
<th>Mitsubishi Electric</th>
<th>Affiliates (Japan)</th>
<th>Affiliates (Overseas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>9,350 million kWh</td>
<td>8,570 million kWh</td>
<td>459,000 kWh</td>
</tr>
</tbody>
</table>

### Products at End of Life

<table>
<thead>
<tr>
<th></th>
<th>Mitsubishi Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air conditioners</td>
<td>11,087 tons</td>
</tr>
<tr>
<td>Televisions</td>
<td>7,741 tons</td>
</tr>
<tr>
<td>Refrigerators</td>
<td>19,256 tons</td>
</tr>
<tr>
<td>Washing machines</td>
<td>5,834 tons</td>
</tr>
<tr>
<td>Personal computers</td>
<td>112 tons</td>
</tr>
</tbody>
</table>

### Recycling

<table>
<thead>
<tr>
<th></th>
<th>Mitsubishi Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals</td>
<td>24,377 tons</td>
</tr>
<tr>
<td>Glass</td>
<td>3,776 tons</td>
</tr>
<tr>
<td>CFCs</td>
<td>256 tons</td>
</tr>
<tr>
<td>Others</td>
<td>4,894 tons</td>
</tr>
</tbody>
</table>
**Goals of Factor X**

Factor X is an indicator of the eco-efficiency of products. The larger the value of X, the more a product’s performance has improved and its negative environmental impact has been reduced. In 2001, we were the first in the industry in Japan to apply the concept of Factor X for product evaluations.

Mitsubishi Electric’s formula for calculating Factor X consists of three components: resources input, energy used, and inclusion of substances potentially harmful to the environment. We have modified the formula twice in the past in order to utilize Factor X at an even higher level in product development. The latest formula (modified in April 2004) adds the degree of improvement in product performance to the scope of evaluation to make improvement visible even in core products rooted in mature technologies.

Factor ratings constitute targets for individual products. They are set by each product’s performance and environmental compatibility. Factor ratings are set by each industry standards, product characteristics, technological complexity and other factors. The Corporate Environmental Sustainability Group then verifies the validity of the target ratings.

There are numerous benefits to using Factor X. For developers, it further clarifies future targets to be achieved, and can be a driving force for the creation of Eco-products, and for consumers, it makes it easier to intuitively appreciate the level of a product’s performance and environmental compatibility.

In order to bring about a sustainable society, people must be offered lifestyles with new forms of added value. The Mitsubishi Electric Group will continue to work to develop and popularize eco-products and take on the challenge of Factor 4, our future target.

**Basic Concepts to Calculate Factor X**

- **Basic concepts to calculate Factor X**
  - Comparison between a new product and a baseline product (in principle, we use Mitsubishi Electric products and a base year of 1990). Evaluations of the performance factor (improvement in product performance) and the environmental impact factor (reduction in negative environmental impact) are multiplied together to produce the rating.
  - The performance index is evaluated by “basic functions (product functions, performance, quality, etc.) multiplied by product life”.
  - The environmental impact of a product is evaluated using sub-indexes for 1) non-recycled materials, 2) energy consumption, 3) toxicity (“MET”, where M is the amount of non-recyclable resources consumed, E is the amount of electrical consumption, and T is the amount of substances potentially harmful to the environment), from which the environmental impact index is calculated for the new product (using a value of 1 for the baseline product), and the final environmental impact index is represented by the length of a vector that combines the three sub-indexes.

- **Factor Calculation**

  \[
  \text{Factor} = \frac{\text{Degree of performance improvement (lifestyle value)}}{\text{Environmental impact reduction (impact on the environment)}}
  \]

- **Example: Washing Machine**

  Factor 3.52 = Performance Factor: 1.620 × Environmental Impact Factor: 2.173

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Product Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>M: Efficient use of resources</td>
<td>E: Efficient use of energy</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>New Product 2004 MIAWD8B8</td>
<td>0.72</td>
</tr>
</tbody>
</table>

- **Improvements**

  | | | |
  | 28% reduction in resource consumption | 66% reduction in energy consumption | Time of one cycle at rated capacity reduced from 63 minutes to 39 minutes |

- **Factor = (A) X (B)**

**Topics**

**Receiving Two Awards for Factor X Initiatives**

In fiscal 2006, Mitsubishi Electric’s Factor X initiatives won the Japan Environmental Efficiency Forum Chairman’s Prize in the popularization and promotion category. We were recognized for the effectiveness of our initiatives, and for our contribution to promoting Factor X inside and outside the company.

In addition, at the EcoDesign 2005 international symposium, a paper we presented, Evaluation Methods and Applications of the Factor X Indicator for the Realization of a Sustainable Society, won the Best Paper Award in the environmental efficiency and eco-design section. The paper considered Factor X methods and applications at Mitsubishi Electric, and received the award for its significance with respect to the application and trial usage of Factor X on a wide range of products from home appliances and electronic devices to non-mass production products in heavy electrical systems.

Inspired by these accolades, we plan to work to promote and improve our calculation method and standardize Factor X so that it is fully accepted by stakeholders and the market.
Creating Eco-Products and Hyper Eco-Products

The Mitsubishi Electric Group has been involved in Design for Environment (DFE) since 1991. We verify compliance with DFE criteria based on “3R Product Assessment”, which was determined from the MET approach. We have also started making evaluations by using lifecycle assessment* and the eco-efficiency indicator Factor X in order to evaluate our products at a sophisticated level.

Products designed for the environment that meet the criteria we have established are designated as Eco-Products. In fiscal 2006, of our 174 product groupings, 77 were considered as DFE-applied targeted products designed for the environment, and the Eco-Products ratio was 74% of the production value of those 77. In addition, 56 Eco-Products that possess outstanding features were certified as Hyper Eco-Products in fiscal 2006.

Going forward, we plan to focus efforts on training key DFE personnel, who will be responsible for instructing designers with respect to the development of Eco-Products and for fully considering environmental measures for products from a lifecycle point of view.

1 “3R” refers to Reduce, Reuse and Recycle.
2 Lifecycle assessment is a methodology to quantitatively and comprehensively evaluate a product’s environmental impact throughout its lifecycle—from resource extraction to design, manufacture, transport, use and end-of-life processing.

Lifecycle Assessments Indispensable to Designing for the Environment

The Mitsubishi Electric Group designs products for the environment by using lifecycle assessments (LCA) as one aspect of its product evaluations. In fiscal 2005, we created an in-house LCA database and standardized procedures for making lifecycle assessments.

In fiscal 2006, we used this database to evaluate lifecycle carbon dioxide for 11 major models of home appliances. As a result, we found that, compared to our products around 10 years ago, we had reduced CO₂ emissions by 62% for hot water supply systems and 57% for air conditioners. Emissions for all 11 models were around 49% lower. (See the feature on pages 15-18.)

Data is sorted into a total of 796 categories in the LCA database and is currently disclosed on our intranet so that product designers of the Group can make good use of it. We also plan to facilitate its further utilization through in-house workshops on lifecycle assessments.

LCA Initiatives Receive Recognition at the 2nd Life Cycle Assessment Society of Japan

The award ceremony of the 2nd Life Cycle Assessment Society of Japan was convened at a parallel event at Eco-Products 2005, one of Japan’s largest environmental exhibitions co-sponsored by the Japan Environmental Management Association for Industry and Nihon Keizai Shimbun Inc. We received an Honorable Mention Award from the society for our LCA initiatives. We were recognized for standardizing LCA evaluation methods as well as for conducting lifecycle assessments in a wide range of businesses, from home appliances to heavy electrical equipment, and for promoting the initiatives both inside and outside the company.
Eco-Products and Hyper Eco-Products

Eco-Products help reduce environmental impact while Hyper Eco-Products possess an even higher level of environmental performance. The following provides a sampling of products designed for the environment that have been certified as such after meeting proprietary criteria.

**MSZ-ZW40TS Room Air Conditioner**

**Factor 2.21 Performance F1.100 X Environmental F2.007**

- Achieves a Factor rating higher than 2
- Utilizes closed-cycle recycling (in-house recycling)
- Energy conservation sensors take into account the temperature as it is perceived by the body, which serves to automatically save electricity by around 30%.
- Places where people actually are, are selected and efficient zone air conditioning increases energy efficiency by around an additional 10%.
- Cleanliness is maintained and energy efficient properties extended by a function for limiting dirt on the inside of the unit and an easy mechanism for cleaning.
- Does not use any substances regulated by the EU’s RoHS Directive or Japan Industrial Standards’ J-Moss standards.1

This air conditioner features two energy conservation sensors for upgraded comfort and energy efficiency.

**Environmentally-Conscious Showcase**

**Factor 1.48 Performance F1.000 X Environment F1.478 (Calculated as Performance Factor 1)**

This showcase for grocery stores simultaneously achieves both energy efficiency and stable temperature control.

- The structure of the air passages has been simplified by optimizing the air curtain to reduce resource consumptions by 10%.
- Annual energy consumption by the refrigeration unit has been reduced by 28% by adopting inverter control, evaporation temperature control in line with showcase operating conditions, and a DC brushless motor that emits minimal heat.
- Uses R404A refrigerant, which has an ozone depletion potential of 0.

**LCD-R37MX5 Wide-Screen LCD Television**

**Factor 7.44 Performance F5.000 X Environment F1.488 (Calculated LCD panel lifespan as the main Performance Factor 1)**

- Achieves a Factor rating higher than 2
- Industry top-class product features and environmental performance

This LCD television features an "auto-turn" function to put it in the ideal position when the user is seated and a brightness sensor that is eye and environment-friendly.

**MR-G50J Refrigerator**

**Factor 2.31 Performance F1.000 X Environment F2.313 (Calculated as Performance Factor 1)**

- Achieves a Factor rating higher than 2
- Uses closed-cycle recycling (in-house recycling)

This refrigerator includes a vegetable compartment that leverages the power of light to increase vitamin content and polyphenols.

- The plastics in refrigerators are designed to be recycled at the product’s end of life, and recycled plastics recovered in house treatment are re-assembled to make new products such as room air conditioners.
- Plastic parts are labeled to facilitate recycling.
- An auto-closing function prevents the door from being left open, preventing cold air rushing out and being wasted.
- A series of sensors for the different compartments makes cooling highly efficient.
- CPFs-free
- The ice maker includes a lead cleaning filter that reduces the amount of lead in tap water by 60%.
- Does not use any substances regulated by the EU’s RoHS Directive or Japan Industrial Standards’ J-Moss standards.1

**General Monitoring and Control System for Public Plants**

**MACTUS-GRX 730/530**

**Factor 1.27 Performance F1.000 X Environment F1.273 (Calculated as Performance Factor 1)**

This multi-controller allows sequence control and instrumentation control to be executed with one CPU.

- Reduces virgin resources (resources that do not include recycled resources) by 7%
- Reduces amount of non-recyclable resources by 0%
- Reduces electrical power consumption by 8%, by making the CPU unit, I/O unit and other parts more compact.
- Reduces substances potentially harmful to the environment by 65%

**Machine-Room-Less Elevator**

**Factor 1.09 Performance F1.000 X Environment F1.094 (only the hoist rated)**

This elevator saves space in the elevator shaft to allow for more flexibility in building design.

- Uses plastic made primarily from corn in a portion of the control panel.
- Uses inverter for lighting to reduce electric power consumption by as much as 25%.
- Regenerative electric power from the elevator raised to cut electric power consumption by about 20%. “When equipped with the optional ‘To Travel’.
- Reduces the amount of chemical substances like toluene and xylene released in the atmosphere or ground.
- The generation of chemical substances limited for the elevator as a whole to at least the levels prescribed in “6th house” related laws and regulations.
- Formaldehyde density at or less than the prescribed level (100μg/m3).

---

1 New standards related to JIS C 0950 (labeling of specified chemical substances contained in electrical and electronic devices) issued on December 20, 2005. Covers seven categories of home appliances and personal computers designated in the Law for Promotion of Effective Utilization of Resources. Since July 1, 2006, it has been mandatory to directly label the presence of six substances on the product unit itself.

2 As of March 2006; via a survey by Mitsubishi Electric
Green Procurement

Mitsubishi Electric carries out green procurement in compliance with the EU’s RoHS Directive and other environmental regulations. We intend to continue to work to reduce environmental impact down the supply chain.

Globalization of Green Procurement

The Mitsubishi Electric Group carries out green procurement on the basis of its Green Procurement Standards Guide, which it drew up in September 2000. (The guide was revised in August 2003 to include measures for complying with the EU’s RoHS Directive.) When procuring materials we research suppliers’ ISO 14001 certification status and state of legal compliance, and give preference to companies that are outstanding in these areas. We also investigate the extent to which chemical substances are contained in procured items, register that information in an internal database, and in this way work to faithfully comply with the RoHS Directive and other laws and regulations.

Beginning in fiscal 2007, we will revise our Green Procurement Standards Guide in line with the Joint Industry Guideline and work toward standardization on a global basis. We will also introduce a green certification system. The system will certify suppliers that faithfully comply with the law as certified green suppliers. Our goal is to procure all our supplies from certified green suppliers by fiscal 2009.

- The RoHS Directive is a directive issued by the European Union restricting the use of six specific chemical substances in electrical and electronic devices. As of July 2006, it has become illegal to sell products containing these six substances in the EU.
- Joint Industry Guideline: Guideline related to the management of chemical substances contained in products issued, based on the agreement of the Japan Green Procurement Survey Standardization Initiative and the U.S. Electronic Industries Alliance.

Complying with the EU’s RoHS Directive

Mitsubishi Electric has worked to eliminate use of the six specific substances ahead of the enactment of the RoHS Directive and has completed RoHS compliance for all products bound for the European Union. We promote green procurement, receive information on the presence of chemical substances in parts and materials, obtain suppliers’ certificates of non-usage in order to guarantee reliability, and run analyses to check for the presence of substances when the risk of contamination is determined to be high.

Business groups and management divisions use fluorescent X-ray analysis to screen for the six elements contained in the specified substances. When chromium or bromine is detected, the presence of hexavalent chromium, polybrominated biphenyl (PBB) or polybrominated diphenyl ether (PBDE) is determined by using one-drop extraction, an analysis method developed proprietarily by Mitsubishi Electric. We plan to continue conducting controls to prevent contamination by the specific substances and to ensure their traceability. We plan to continue strengthening our initiatives in this area.

- The six specific substances are lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE).

Compliance with Japan’s J-Moss

J-Moss went into effect on July 1, 2006, making it mandatory in Japan to provide information on the presence of the six substances specified by the RoHS Directive and to disclose other related information. When a product does not contain the six substances, it can be labeled with the Green Mark. Mitsubishi Electric has been working to completely eliminate use of the six substances in all products sold in Japan, and since April 1, 2006, we have disclosed information on the presence of the substances on our website as a category of product data. We intend to work to further expand application of the Green Mark.

We completely eliminated the use of lead solder on printed circuit boards for home appliances before the end of March 2005 and switched to solder that does not contain lead. Also, we are working to ensure awareness of this aspect of our products by labeling them as using lead-free solder, in order to provide information on appropriate processing and recycling when they are disposed of or recycled.

- J-Moss is a new set of regulations affiliated with JIS C 0950, which was issued on December 20, 2005, and concerns the disclosure of the presence of specific chemical substances in electrical and electronic devices. Seven categories of home appliances and personal computers designated in the Law for the Promotion of Effective Utilization of Resources are subject to the regulations.

Strengthening Supply Chain Management Ahead of Tightening Regulations on Chemical Substances

In China as well, the Law on Preventing Contamination of Electronic Products will go into force in March 2007. New European Union regulations on chemical substances, REACH, are also set to go into effect in the spring of 2007. In order to comply with these regulations, we will cooperate with the entire supply chain, including material suppliers, to appropriately manage chemical substances and avoid contamination by regulated substances.

We plan to work to further enhance green procurement and bolster supply chain management inside and outside of Japan.

- The Ministry of Information Industry issued regulations on February 28, 2006 that it formulated in conjunction with six government agencies, including the National Development and Reform Commission and Ministry of Commerce. The regulations make it mandatory to disclose information and provide labeling for the six substances specified by the EU’s RoHS Directive.
- The REACH regulations will make it mandatory to conduct safety evaluations on almost all chemical substances sold in the EU. It will require the registration of chemical substance data within three to 11 years for substances manufactured in quantities greater than one ton per year per company. Products containing chemical substances that have not been registered will not be allowed to be sold in the EU.
Preventing Global Warming

We will continue to work to meet our reduction targets for carbon dioxide and other greenhouse gases, and contribute to the fight against global warming.

CO₂ Emissions in Fiscal 2006

In 1997, Mitsubishi Electric established a voluntary environmental target of reducing carbon dioxide emissions per unit of sales by 25% by fiscal 2011, compared to fiscal 1991. Under our 4th Environmental Plan, the target for all manufacturing sites was to reduce CO₂ emissions per unit of sales in fiscal 2006 by 20% over fiscal 1991. To achieve this goal, we carried out initiatives to reduce emissions per unit of production value by 1.5% each year at Mitsubishi Electric, and 1.0% each year at affiliated companies.

Our CO₂ emissions from production activities in fiscal 2006 amounted to 447,000 tons, which represents a reduction over fiscal 1991 of 20% on per net sales.

Under our 5th Environmental Plan, which starts in fiscal 2007, we will switch to managing emissions per net production value, which incorporates the corporate goods price index into production value, in order to further clarify our efforts in energy conservation. We will also expand the scope of these efforts to the entire Group and strive for further reductions. (See page 30 for specific targets.)

* Mitsubishi Electric spun off its semiconductor division in April 2003 (presently Renesas Technology Corporation). Figures are calculated while excluding the impact of this event.

Reduction of 6,510 tons-CO₂ in Production Activities

We set a goal of reducing CO₂ emissions derived from energy usage in production activities by 46,000 tons by fiscal 2011, compared to fiscal 2005 levels. To accomplish this, we have been installing high efficiency equipment, conducting energy-loss minimization (EM) activities, shifting to alternative fuels, and introducing co-generation systems to make electricity usage readily apparent for each production process and facility at our factories.

In fiscal 2006, we invested 1.59 billion yen in three projects, excluding co-generation systems*, and succeeded in reducing total CO₂ emissions by 6,510 tons. (See the diagram below for a breakdown). In fiscal 2007 and beyond, we plan to actively introduce Mitsubishi Electric “Top Runner” products, including air conditioners and transformers, and carry out other initiatives to further reduce CO₂ emissions.

*1 Since establishing these four strategies, the price of electricity has dropped and the benefits of introducing co-generation have diminished, so we postponed installing new systems in fiscal 2006.

*2 Top Runner products are those that meet certain standards based on the “Top Runner” approach to setting performance standards established in the Law Concerning the Rational Use of Energy. The approach involves putting energy efficiency standards at, or above, the most energy efficient products currently on the market.

Breakdown of Energy Usage

| Heavy fuel oils 2% | LPG 2% | Electricity 83% |
| City gas 11% | Kerosene 2% |
| Kerosene 3% | Heavy fuel oils 4% |
| Gasoline 4% | LPG 7% | Electricity 79% |

Making Energy Usage Readily Apparent

Energy measuring monitors have been established to measure energy usage in real time at factories, business offices and utility facilities (compressors, etc.). When energy usage is converted to data, it can be grasped immediately, so energy loss can be eliminated by sharing information and making comparisons.

Fiscal 2006 Results of 4 Energy Conservation Strategies

<table>
<thead>
<tr>
<th>Reduction target for 2011 (tons-CO₂)</th>
<th>Reduction in fiscal 2006 (tons-CO₂)</th>
<th>Investment in fiscal 2006 (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Installation of highly energy-efficient equipment (including photovoltaic power generation)</td>
<td>25,000</td>
<td>5,910</td>
</tr>
<tr>
<td>2) Energy-loss minimizing project</td>
<td>8,000</td>
<td>266</td>
</tr>
<tr>
<td>3) Introduction of co-generation systems</td>
<td>9,000</td>
<td>0</td>
</tr>
<tr>
<td>4) Conversion to alternative fuels</td>
<td>4,000</td>
<td>334</td>
</tr>
<tr>
<td>Total</td>
<td>46,000</td>
<td>6,510</td>
</tr>
</tbody>
</table>
Reducing Emissions of Greenhouse Gases

Greenhouse gases other than carbon dioxide emitted in the business activities of Mitsubishi Electric include hydrofluorocarbon (HFC) and hydrochlorofluorocarbon (HCFC), which are used in refrigerant for air conditioners and refrigerators, perfluorocarbon (PFE), which is used in the etching process for semiconductors and liquid crystals, and sulfur hexafluoride (SF₆), which is an electrical insulating gas used in gas-insulated switches.

As measures to reduce these emissions, we are carrying out activities such as collecting and reusing the gas we have used, making devices more compact, switching to gas that has a low Global Warming Potential¹, and removing and destroying the emitted gas.

We have met our fiscal 2005 target emissions ratio of 0.2% for HFC and HCFC, but in fiscal 2006, we made further progress in converting to a type of HFC with a smaller global warming coefficient, which served to further reduce the ratio to 0.18%.

PFC emissions have been one-sixth the target value for the gaseous form and one-tenth the target for the liquid form, and we intend to work to continue to maintain these levels.

Another company was merged into Mitsubishi Electric in fiscal 2006², so the amount of SF₆ we handled increased. However, we reduced the emissions ratio to 2.5% by improving testing processes and enhancing recovery facilities, thereby bettering our target of 3%.

¹ Global Warming Potential expresses the strength of the greenhouse effect, when the greenhouse effect of carbon dioxide is set at one.
² Mitsubishi Electric dissolved TMT&D Corporation in the area of power systems and substations.

### Topics

**Receiving the Award for Outstanding Energy Conservation at Factories for Aggressive Promotion of Energy Conservation Measures (Power Device Works)**

Power devices are used for power conversion and control in a wide variety of products, from home appliances to cars and trains, to photovoltaic power generation and the new energy sector. Manufacturing power devices, however, consumes a substantial amount of energy because air-conditioned indoor environments have to be maintained for power facilities, clean rooms and other areas. Power Device Works therefore aggressively carried out energy conservation measures on these air-conditioned environments because they account for a majority of electric power consumed. As an example, transformers were updated to new energy-efficient models, wafer production lines that had been split up on two floors were combined on one floor, and the computer room was made more energy efficient. These efforts were highly successful, as Power Device Works reduced power consumption in fiscal 2005 by 38% compared to fiscal 2003.

It also actively participated in the Energy Conservation Education Program at primary/middle model schools promoted by the Energy Conservation Center, Japan, by holding an environmental class for fourth graders. The class taught the children about the importance of energy conservation and explained energy conservation activities on the production floor in an easy to understand manner. The class also included a factory tour. These activities were duly recognized, and Power Device Works received the Economy, Trade and Industry Minister’s Prize (Electronics Category) at the Awards for Outstanding Energy Conservation at Factories.

**Centrifugal Refrigerating Machines**

Centrifugal refrigerating machines were updated for air-conditioned, cold water manufacturing to cut power consumption by 9%.

**Computer Room**

Unnecessary computers were disposed of, new models with low power consumption installed, and the number of operating air conditioners reduced to cut power consumption by 70%. The required space was also reduced by two-thirds.

**Transformers**

Transformers were updated with highly efficient models made by Mitsubishi Electric. Equipment will continue to be revamped as needed to make it possible to reduce energy consumption by 25% by 2010.
Environmental Performance

Appropriate Management and Controlling Emissions of Chemical Substances

Mitsubishi Electric continues to reduce the discharge of harmful chemical substances and emission of greenhouse gases through self controls that utilize our proprietary chemical substance management system.

Utilizing the Chemical Substance Management System to Reduce Discharge and Transfer

The Mitsubishi Electric Group (production facilities in Japan) has been conducting voluntary controls of chemical substances since 1997. We currently manage 505 substances, including 354 PRTR-designated substances*, and others managed voluntarily such as HFC and HCFC, which are contained in the refrigerant used in air conditioners and coolers. Utilizing our chemical substance management system, which includes purchase data on parts and materials, we select substances to reduce on a priority basis then work to reduce their emission or discharge. Our goal was to reduce the release of chemical substances by 18% in fiscal 2006, compared to fiscal 2003.

We reduced 104 types of chemical substances used in fiscal 2006 (97 by Mitsubishi Electric), a total of 6,134 tons, and reduced transfers by 948 tons, for a 25.5% reduction compared to fiscal 2003, which met our goal. We plan to expand these management activities to include materials used at our office locations.

* PRTR: Pollutant Release and Transfer Register

Initiatives to Reduce Volatile Organic Compounds

Mitsubishi Electric is involved in coating large products, applying insulating varnish to motors, and many other similar production processes, so volatile organic compounds (VOCs) like toluene, xylene, styrene and ethyl benzene account for over half of our chemical substance transfers. For this reason, we have made VOCs a priority for our reduction activities.

In fiscal 2006, we reduced discharges by 17 tons compared to fiscal 2005 by altering manufacturing processes to cut back usage frequency, and replacing paints and varnishes with products that have low VOC content. VOC regulations will tighten in fiscal 2007 with amendments to the Air Pollution Control Law, so we plan to reduce VOC discharge by installing abatement systems and revamping production processes.

Material Balance of Chemical Substances Subject to Regulation

Chemical substances handled 6,134 tons

Released to atmosphere

Chemicals handled 6,134 tons

Mitsubishi Electric 1,584 tons

Mitsubishi Electric 4,551 tons

Recycled 68 tons

Mitsubishi Electric 60 tons

Treated in-house 208 tons

Mitsubishi Electric 145 tons

Mitsubishi Electric 63 tons

Released into public waters 4.5 tons

Shipped as product 4,974 tons

Affiliates in Japan 1,304 tons

Mitsubishi Electric 3,670 tons

Disposed of as waste 283 tons

Affiliates in Japan 59 tons

Mitsubishi Electric 223 tons

Released into sewage system 8 tons

Affiliates in Japan 2.3 tons

Mitsubishi Electric 2.2 tons
Reduce, Reuse and Recycle—The 3Rs

With a view to realizing a recycling-based society, Mitsubishi Electric works to make effective use of resources to the full extent possible, strengthen controls at the level of waste generation, and reduce, reuse or recycle waste that is generated.

Mitsubishi Electric Achieves Zero Emissions 4 years in a row Affiliates in Japan Fall Short of Target

Under the 4th Environmental Plan, our goals included promoting “zero emissions” and reducing total waste disposal per net sales by 6% from fiscal 2003. Mitsubishi Electric achieved zero emissions four years in a row by fully sorting waste and communicating information on effective resource usage. The percentage of waste sent to landfills at affiliated companies in Japan was 2.4%, which represents a 1.9% improvement over fiscal 2005, but still falls short of the target. In response, we plan to further subdivide waste products and step up recycling efforts.

Also, in fiscal 2006, the overall domestic volume of total waste disposal was 136,000 tons. This was an increase per net sales of 8% from fiscal 2003, and meant we were unable to achieve our target. Our 5th Environmental Plan sets the target of improving total waste disposal by 10% per net real production value compared to fiscal 2005 for our manufacturing divisions, and improving it by 10% per net floor space compared to fiscal 2005 for our administrative divisions. In addition, with regard to zero emissions, we will carry out activities to make the volume of landfill waste 0.5% or less of the total amount of waste disposal at Mitsubishi Electric. The target will be 1% or less for affiliated companies. In order to achieve these goals, we will strengthen controls at the upstream waste generation stages—procurement, design, production, etc.—and our manufacturing factories, affiliated companies and recycling partners will work together on a regional basis to promote the 3Rs (reduce, reuse or recycle) for product waste that is generated. In fiscal 2007, we plan to develop a system to put this approach into practice starting with plastics.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Waste Disposal (10,000 tons)</th>
<th>Percentage of Waste Going to Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>8.8</td>
<td>3%</td>
</tr>
<tr>
<td>2004</td>
<td>7.75</td>
<td>3%</td>
</tr>
<tr>
<td>2005</td>
<td>8.12</td>
<td>4%</td>
</tr>
<tr>
<td>2006</td>
<td>8.34</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Zero emissions* is achieved when total landfill waste is 1% or less of the total volume of waste disposal.

Topics

Introduction of an Electronic Manifest System

(Kamakura Works)

In order to deter the illegal dumping of waste products, Kamakura Works has a waste management system that allows waste products to be tracked and checked in real time from emission to final disposal. Positioning data is obtained with a global positioning system (GPS) satellite, and photos taken at emission and disposal sites using GPS receiver-equipped digital cameras and camera phones are attached to a manifest as evidence of disposal, thereby enabling the uniform management of waste products. The positioning and data stamps, which are a feature of this system, have been adopted by our COCO-DATES system.

Topics

Expanding Successful Experiments to Affiliates and Suppliers (Fukuyama Works)

Since April 2004, Fukuyama Works has recycled 100% of its waste, from industrial waste to general waste from business, thereby reducing zero the amount of waste it sends to landfills or disposers of through combustion.

Normally, the commission cost for recycling tends to be larger than the cost of contracting out waste disposal. Fukuyama Works, however, was able to reduce recycling costs by 19% (compared to fiscal 2001, before the achievement of zero emissions) by cutting the amount of waste generated, proving that it is possible for 3R initiatives to be economical.

Fukuyama Works is now introducing its practices to nearby affiliates and suppliers, which is translating into reduced waste volumes and greater recycling. The practices were introduced to four companies in fiscal 2005 and two companies in fiscal 2006.
Recycling End-of-Life Products

In compliance with the Home Appliance Recycling Law and the Law for the Promotion of Effective Utilization of Resources, Mitsubishi Electric promotes the end-of-life recycling of four types of home appliances as well as personal computers. We are also devoting resources to the development of new recycling technologies.

Recycling Four Types of Home Appliances

The Law for the Recycling of Specified Kinds of Home Appliances (Home Appliance Recycling Law) went into force in April 2001, but two years prior to this in 1999, Mitsubishi Electric established the Higashihama Recycle Center (currently Hyper Cycle Systems Co., Ltd.), the industry’s first recycling plant for end-of-life home appliance products.

The center acquired ISO 14001 certification in April 2001, and 245,000 tons of air conditioners, televisions, washing machines, refrigerators (the four types of home appliances subject to the law) and office equipment were recycled by March 2005. Information acquired on dismantling and sorting is reported back to product design divisions and is utilized in product design to increase the recycling ratio.

In addition, Mitsubishi Electric has teamed with five other home appliance manufacturers*1 to cooperate with one another in recycling end-of-life home appliance products. The companies have established recycling centers at 16 sites around Japan. In fiscal 2006, we recycled 1,070,000 home appliances in the four categories (104% of last year’s level) while the recycling ratio was 75%.

Recycling Personal Computers

In compliance with the Law for the Promotion of Effective Utilization of Resources (amended Recycling Law), we have recycled used office computers since April 2001 and used home computers since October 2003. In fiscal 2006, we collected a total of 10,726 home and office computers, which represented a recycling rate of 78%.

Mitsubishi Electric established the Information Device Recycling Center to take inquiries and applications for collection and recycling. The center works to recycle resources under a management structure that uses a web-based system to lend transparency to the processing flow, from collection to recycling.

Data being divulged from the hard disk drives of computers being disposed of has become problematic. This is basically the responsibility of the computer user, though the company we contract to handle computer recycling pushes holes in the hard disk drive or uses a strong magnet to physically and magnetically destroy any data and prevent undeleted data from leaking out. Interested computer owners can also pay to have a program completely delete all data before the computer is taken away.

### Home Appliance Recycling (Fiscal 2006)

<table>
<thead>
<tr>
<th></th>
<th>Air Conditioners</th>
<th>Televisions</th>
<th>Refrigerators/Refrigerators</th>
<th>Washing Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units processed</td>
<td>1,000 units</td>
<td>262</td>
<td>284</td>
<td>343</td>
</tr>
<tr>
<td>Weight processed</td>
<td>11,087 tons</td>
<td>7,741</td>
<td>19,256</td>
<td>5,834</td>
</tr>
<tr>
<td>Ratio reused in products</td>
<td>Percentage</td>
<td>94%</td>
<td>76%</td>
<td>68%</td>
</tr>
</tbody>
</table>

### Material Recycling from Used Computers (Home and Office) (Fiscal 2006)

<table>
<thead>
<tr>
<th></th>
<th>Drivers</th>
<th>Notebooks</th>
<th>CRT Displays</th>
<th>LCD Displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units collected</td>
<td>Office 3</td>
<td>Home 42</td>
<td>Home 77</td>
<td>Home 78</td>
</tr>
<tr>
<td>Weight recycled</td>
<td>Office 3,305</td>
<td>Home 404</td>
<td>Office 2,327</td>
<td>Office 2,333</td>
</tr>
<tr>
<td>Ratio of reuse and material recycling</td>
<td>44.5%</td>
<td>4.8%</td>
<td>3.7%</td>
<td></td>
</tr>
</tbody>
</table>

*1 Fujitsu General, Hitachi Appliances, Sanyo Electric, Sharp, and Sony. (Alphabetical order)

### Topics

**Hyper Cycle Technology—Mitsubishi Electric’s Home Appliance Recycling Technology**

Mitsubishi Electric is committed to eliminating disposal via landfills or combustion by recycling 100% of its waste. As a part of this commitment, we are engaged in research and development on Hyper Cycle Technology, which pursues quality in recycling.

For example, conventionally, in reusing mixed, pulverized plastics, material recycling could not be conducted in a closed loop from home appliance to home appliance because it was exceedingly difficult to sort and recover materials at a high grade from various types of waste plastic. In response to this predicament, in 2004 we led the industry in developing a technology for automatically sorting, recovering and reusing plastics at a high grade starting with various types of combined waste plastics, thus allowing the plastics to be reused from home appliance to home appliance.

We plan to continue to expand the application of this Hyper Cycle Technology and work to put into practice “End-of-Life: Eco,” which is our slogan for “Uni & Eco,” our new concept for home appliances. (See pages 15-18 for more information.)

![Dismantling a product at Hyper Cycle Systems](image)
Eco-Friendly Logistics

We are actively working to reduce the environmental impact of logistics through distribution reforms in the form of modal shifts from trucks to rail, and the elimination of the use of wood in packaging materials.

Expanding a Modal Shift to Reduce CO₂ Emissions

In coordination with Mitsubishi Electric Logistics Cooperation, the Mitsubishi Electric Group is switching over from trucks to rail and maritime shipment.

Our goal for fiscal 2006 was to reduce carbon dioxide emissions by 20% per unit of shipping weight compared to fiscal 2003, and we successfully reduced emissions by 17% (103,000 tons-CO₂). The modal shift accounted for 14% of total shipping volume, an increase over fiscal 2003 of 5%. Rail transport accounted for 5.8% (on a ton-kilometer basis). In order to further increase the ratio of rail transport, we are gradually transitioning to rail by using 12-foot rail containers, two of which are comparable to one 10-ton truck, and 31-foot rail containers, which are equivalent to a 10-ton truck in terms of capacity and weight.

Domestic Shipping Initiatives

We are increasing round-trip shipping contracts between the Kansai and Kanto regions, where the bulk of our product shipments take place, to increase shipping efficiency and reduce carbon dioxide emissions. Mitsubishi Electric Logistics is adding hybrid, low-emissions vehicles to its fleet and promoting “eco-drive” activities, which involve expanding the installation of vehicle operation control systems and ensuring drivers do not idle their engines.

In conjunction with enactment of the amended Law Concerning the Rational Use of Energy, in fiscal 2007 we will work to reduce carbon dioxide emissions, not only for product distribution, but also for waste and supply logistics. We will try to make waste and loss in logistics readily apparent. Our goal for product distribution is to reduce CO₂ emissions by 30% per net shipping weight by fiscal 2009, compared to the level in fiscal 2003.

Using Optimal Routes and Modes of Transport for Each Final Delivery Destination

When importing products manufactured overseas into Japan, in the past we would bring the products to the Port of Tokyo in large capacity containers, then deliver them by truck to consumer outlets around the country. Since fiscal 2005, however, we have used the optimal routes and modes of transport for each final destination. This involves using large capacity containers when the unloading port is close to areas of high demand and smaller containers for cities where demand is lower. In this way, we are working toward international multi-modal transport, which exerts a smaller impact on the environment.

Eliminating Wood Packaging Materials

As a part of the Mitsubishi Electric Group’s efforts to reduce the volume of packaging materials, it is particularly focused on eliminating wood packaging. Except for certain products, wood materials have already been replaced for products sold in Japan and products for export. Exported products face a different set of circumstances in terms of transport, storage and handling, but we have taken committed steps to reducing wood materials. As a result, wood packaging used in fiscal 2006 totaled 10,900 tons, a reduction of 36% compared to fiscal 2002.

We plan to continue making strides toward eliminating wood materials and at the same time expand use of disposable packaging materials. Our goal is to reduce throwaway packaging materials by 10% per unit of shipping weight by fiscal 2009, compared to fiscal 2005 levels.

* Data are compiled for Mitsubishi Electric and those affiliates in Japan with an environmental plan.

Packaging Materials Used

<table>
<thead>
<tr>
<th>Year</th>
<th>(1,000 tons)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>495</td>
<td>125</td>
</tr>
<tr>
<td>2003</td>
<td>495</td>
<td>125</td>
</tr>
<tr>
<td>2004</td>
<td>495</td>
<td>125</td>
</tr>
<tr>
<td>2005</td>
<td>495</td>
<td>125</td>
</tr>
<tr>
<td>2006</td>
<td>495</td>
<td>125</td>
</tr>
</tbody>
</table>

Wood Used for Packing/Packaging

<table>
<thead>
<tr>
<th>Year</th>
<th>(1,000 tons)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>48.7</td>
<td>120</td>
</tr>
<tr>
<td>2003</td>
<td>48.7</td>
<td>120</td>
</tr>
<tr>
<td>2004</td>
<td>48.7</td>
<td>120</td>
</tr>
<tr>
<td>2005</td>
<td>48.7</td>
<td>120</td>
</tr>
<tr>
<td>2006</td>
<td>48.7</td>
<td>120</td>
</tr>
</tbody>
</table>

12-foot container on a flat rack
Collaborating with Stakeholders

The Mitsubishi Electric Group has held biannual Environmental Management Advisor Conferences since 2003 for the purpose of improving environmental management and CSR initiatives by listening to the opinions of experts. The fourth conference was held on September 29, 2005 and the fifth on May 25, 2006.

Theme from 4th Conference

Enhancing Communication and Social Reporting as a Global Company

At the fourth conference, we solicited the expert opinions of our advisors on the Mitsubishi Electric Group’s 2005 Environmental Sustainability Report.

With regard to the message of the report and social reporting, we received very valuable opinions on the importance of communicating information for each region as a global corporation, enhancing social reporting and accumulating performances. We referenced these comments in drawing up our 5th Environmental Plan, and in planning and editing the 2006 Environmental Sustainability Report, enhancing reporting on our environmental responsibilities and including information on how our business activities contribute to society. In our 5th Environmental Plan as well, we clearly laid out our commitment to helping protect the environment through our business activities. However, we have not yet adequately reported on a region-by-region basis as a global company. Also, we have decided to put up for consideration reporting on human rights and related matters.

Hisashi Ishitani
- The goals of your activities are clearly in line with the corporate mission, so why not emphasize the economic benefits of building win-win relationships and their importance as a means of achieving your goals.
- Not including information on environmental legal compliance and occupational health and safety considerations in the report because they are a matter of course for a company in Japan, then translating the report directly and distributing it overseas could lead to misunderstandings. You should consider the particular perspectives of regions where business activities are conducted and think about providing supplementary information.

Sachiko Takami
- There are differences between the understanding of CSR in Japan and in the West. One example is the fact that the problem of poverty is hardly taken up at all by reports put out by Japanese companies. I think there are some difficulties involved, but I think it is necessary to put out the kind of information expected by stakeholders in Europe.
- I think reducing environmental impact should not only be approached as a social responsibility. I think it would be good to emphasize technological contributions more actively. This is because viewing environmental contribution as a business opportunity and succeeding at a management level will lead to sustainable development.

Kikuko Tatsumi
- Corporate social responsibility is important, but so is Customer Service. I would like to see information on two-way communications with consumers in order to ensure they are satisfied with your products.
- I think that devoting effort to supply chain management should be tied to the possibility of procuring sustainable resources and the issue of responsibility for the earth’s ecosystem.
Communicating with Narratives from a Long-Term Perspective

At the 5th Environmental Management Advisor Conference, for the first time we had a presentation given by an advisor on the environmental information that consumers are demanding. The focus of corporate environmental initiatives is switching from recycling to reducing environmental impact throughout product lifecycles, and providing information to consumers and their feedback on that information are becoming increasingly important. Against this backdrop, the advisor discussed how environmental information should be presented so that it is understandable to consumers.

Moreover, we received opinions on our 5th Environmental Plan, and there was lively debate between the invited experts and representatives of Mitsubishi Electric. Our 5th Environmental Plan was evaluated as being easy to understand and as correctly unifying activities to reduce environmental impact with business development. Other comments affirmed the balanced management concept and the ongoing training of key environmental personnel. On the other hand, some issues were pointed out. We were told that the difference between Eco-Products and Hyper Eco-Products is generally difficult to grasp. It was also suggested that, because our strength is in products that make up social systems, we should cultivate our image as a company that contributes to a sustainable society in this area, and that because consumers primarily come into contact with the company through products and after-sales service, we should specifically emphasize initiatives in this area. Moreover, it was also suggested that we should tell a narrative about the company while including the idea that the ongoing existence of the company is important to the earth itself. We listened intently to these opinions and plan to consider them closely to make further improvements.

Comments from Advisors

Hisashi Ishitani
When Japanese consumers look at products, they first think of performance, secondly price, and finally waste disposal. Having said this, though, I get the sense that recently they have come to prioritize reliability as an environmentally conscious brand too. Consumers want to have the sense that if they buy a particular manufacturer’s product it will be good for the environment in some way. If Mitsubishi Electric, as an all-round electric and electronic manufacturer, chooses to add more narrative elements to its environmental plan and sustainability report, I think reporting on sustainable systems—invoking the problem of freeing energy usage from reliance on petroleum and the issue of reducing carbon dioxide emissions—would be ideally suited to this kind of report. If the report pivots on technologies that will fundamentally solve these problems over the long term, say 30 or 50 years, it would make the report easy to understand by non-specialists and the general public.

Sachiko Takami
In Sweden recently, two in ten new cars sold are eco-cars. This is not because some people who are highly aware of environmental issues are buying the cars, but because regular consumers are starting to buy them. The reason is because there are economic benefits to buying an eco-car. Government incentives in the form of an energy tax and CO2 tax have made the price of ethanol and bio fuels less expensive than gasoline. Safety provides the incentive when deciding on which food products to buy, but with cars and home appliances, I think economic benefit serves as an important incentive. An approach to government incentives is also necessary.

As Mitsubishi Electric is aiming to use narratives to promote its initiatives and is committed to sustainability, I expect it to declare a bold vision that will leave an impression on everyone, such as the goal of having factories that do not use any fossil fuels.

Kikuko Tatsumi
It is important that all of Mitsubishi Electric shares the strong desire to continue to be a company that is needed by society in 2053, as is the question of how to share that commitment with the public. I think that one way is through conferences like this. Providing reliable environmental information is valuable for a company in that it helps the company distinguish its products from conventional and competitor products. It also improves the image of that company as an environmentally conscious corporation. Consumers get the peace of mind of being able to buy truly reliably environmentally friendly products, which enables them to build sustainable lifestyles. A company’s stance with respect to the environment cannot be understood without looking at its environmental sustainability report. I think it is necessary for consumers to look closely at such reports and environmental information on products.

Representing Mitsubishi Electric

I would like to express my gratitude to all our advisors for their opinions, which are rooted in their respective areas of expertise. A common thread running through all the proposals is that while Mitsubishi Electric is seriously tackling manifold issues, it needs to clearly convey a narrative of what it is aiming for. We definitely plan to use this insight in future activities.

(Kenichiro Yamanishi)

Thank you very much for your valuable opinions. We ourselves have agonized over how much environmental information to disclose. Similar to how producer information is disclosed on agricultural products, I think that manufacturers may be expected to provide information on who made the parts and products. I think this would make it easier for consumers to translate their beliefs into actions.

(Takashi Yoshida)
Fulfilling Responsibilities to Stakeholders

As a member of society, a company must not only fulfill its environmental responsibilities but also meet its responsibilities to stakeholders in order to ensure its own survival and help bring about a sustainable society. The Mitsubishi Electric Group is committed to improving communication with its diverse groups of stakeholders, incorporating their opinions and building good relationships.
Ceaseless Efforts to Improve Quality

Under our company-wide quality assurance system, we engage in ceaseless efforts to improve quality in all business processes—from design and development to manufacturing, shipping and beyond.

Basic Philosophy on Quality and Quality Management System
Mitsubishi Electric formulated a company motto, “Service Through Quality,” in 1952. This spirit of serving society through reliable product quality lives on today in our four basic philosophies of product quality.

On the basis of these philosophies, we have developed a company-wide system for quality assurance and improvement, and have established rules for quality assurance. We proactively comply with laws and regulations pertaining to quality, and work to advance activities for quality assurance and improvement.

Our manufacturing works in Japan and overseas are responsible for assuring the quality of individual products, and they also carry out concrete initiatives for improving quality.

Four Basic Philosophies for Quality
1) Product quality is our top priority. It comes before price and on-time delivery.
2) Whatever the sacrifice, our commitment to good quality does not waver.
3) Products must be safe to use, have a long usage life, and have consistent performance.
4) Every manager and employee involved in manufacturing a product shares equal responsibility for the quality.

Quality Improvement Activities
The Mitsubishi Electric Group incorporates quality considerations into products from the design and development stage, promotes activities to improve quality in all processes, from design and development to manufacturing, shipping and beyond, and works to make ongoing improvements in product quality, safety and reliability.

We have also built a database for sharing quality-related information that is used by the entire company. It consists of information provided by prior employees on past problems, lessons learned, explanations and defects, as well as examples of improvements that have been made. The system has proven effective in helping to build quality into products, implement quality improvement measures, prevent the occurrence or recurrence of problems, and train young engineers.

Even at the manufacturing stage, we work to make quality readily apparent to help prevent problems before they occur and promptly respond to them when they do. Problems are fed back to development and design divisions, where efforts are then made to further improve quality.

Topics
Quality Improvement in Every Process
Development, Design and Materials Procurement

Design reviews are conducted at multiple stages. Parts and materials are checked for quality, reliability and safety before being purchased. We also conduct regular quality audits to promote quality-related improvements by suppliers.

Manufacturing and Shipping
We ensure quality by running tests at each stage in the process, from manufacturing to shipping, as well as tests of the final, finished product.

Sales and After-service
Information on product functions and procedures for diagnosing problems are provided to sales outlets so that appropriate after-sales service is conducted. We also hold training sessions for companies that service our products and provide technical information of various kinds in an effort to improve service quality.
Providing Easy-to-Use Home Appliances and Pursuing Customer Satisfaction

Mitsubishi Electric utilizes a unique evaluation system to create products that are truly easy for customers to use. We are committed to improving customer satisfaction through improvement activities rooted in various types of research and through promptly responding to customer inquiries and product defects.

Universal Design Provides Ease of Use to More Customers

Universal design refers to designing products so that they can be used by as many people as possible. Mitsubishi Electric works to make products that are truly easy to use and easy to live with, by assessing products in terms of whether they facilitate worry-free living, are simple and easy to understand, use displays and expressions that are easy to identify, and incorporate ergonomic considerations. 11 products earned the universal design accreditation in fiscal 2006. They included an air conditioning unit that automatically adjusts to a temperature that feels pleasant, as well as a refrigerator/freezer that can be opened and closed with minimal effort, provides easy access to its contents and incorporates a number of other creative innovations. (Additional information is provided on the page on 15.)

Topics

Examples of Universal Design

<table>
<thead>
<tr>
<th>Refrigerator</th>
<th>Includes an auto closing function that allows the door to be closed with minimal effort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Jet Towel” Hand Dryer</td>
<td>Hands are inserted at 15° to make it easy to use from a natural posture.</td>
</tr>
<tr>
<td>Induction Heating Rice Cooker</td>
<td>The large LCD panel is tilted at 55°, making it easy to see and touch.</td>
</tr>
<tr>
<td>Microwave Oven</td>
<td>The transparent door makes it possible to check whether the food is done while it is cooking.</td>
</tr>
</tbody>
</table>

Becoming Number-One in Customer Satisfaction for both Products and Services

A precondition for providing the kind of value that will excite customers is determining their current level of satisfaction. For this reason, each of our manufacturing works administers questionnaires for people purchasing its products and conducts surveys using product testers. We also survey general customer and sales outlet satisfaction levels through our website and by using the services of marketing research firms.

In a survey of induction heating ranges conducted in fiscal 2006*, purchasers of the product gave us an overall customer satisfaction score of 86.1 points (extremely satisfied was 120 points, satisfied, 80 points, and somewhat unsatisfied, 40 points). In a customer satisfaction survey on manufacturer support at large home appliance retailers, our sales outlets ranked us second overall** and first in the air conditioner category for the fourth consecutive year***. In addition, according to a questionnaire on customer satisfaction related to repair services provided to customers that requested them****, we received a satisfaction rating of 96%. These results will be communicated throughout the Group, incorporated back into sales and development strategies, and utilized in activities aimed at making us number-one in the home appliance industry in terms of sales and service.

Moreover, at Mitsubishi Electric we are working to systematically clarify a customer satisfaction index in order to develop a more comprehensive way of evaluating customer satisfaction, and during fiscal 2007 we plan to finish developing a new manual for customer satisfaction surveys on products, sales and services.

• From a customer service questionnaire report by Mitsubishi Electric Home Appliance Co., Ltd.
• From the results of a 2006 customer satisfaction survey of consumer electronics retailers regarding manufacturer services, administered by RIC Co., Ltd.
• From a survey of manufacturer services related to air conditioner repair in the busy summer period, administered by RIC Co., Ltd.
• From the compiled results of a customer questionnaire administered by Mitsubishi Electric System & Service Co., Ltd.

Further Raising Customer Satisfaction by Communicating the Index Throughout the Company

Kazuo Ikeda

Customer Satisfaction
Department, Living Environment & Digital Media Equipment Group

We have revised our Customer Service Promotion Manuel many times since it was first formulated in 1986, but most recently we improved it to include not only our thinking on customer satisfaction and explanatory examples but also practical information on utilization methods. Also, our various customer satisfaction surveys had tended to be administered on a one-off basis, so we attempted to develop systematic initiatives that would improve customer satisfaction by quantifying the survey results at each stage—from product concept creation to lifecycle end—and by having relevant divisions share that information with one another.

It goes without saying that our home appliance products play an important role in improving the image of the Mitsubishi Electric brand. By continuing to value input from customers and conducting activities to raise customer satisfaction, I think it will be possible to either maintain or further swell the ranks of loyal Mitsubishi Electric customers.
Advice and Service Requests Available 24-Hours Year Round

The Living Environment & Digital Media Equipment Group, which handles home appliance products, has established the Customer Response Center and the Service Center for individual consumers to respond to questions about how to use our products and requests for product repairs. In addition, the Technical Support Center takes questions 365 days a year from our retailers. Questions asked at these centers are stored on our servers and fed back to the quality assurance divisions at each of our manufacturing works. Moreover, important matters and improvements are reported to the divisions on a monthly basis.

Inquiries that come in via our website are routed to the responsible division and processed the next day. In fiscal 2006, we improved the operability of this inquiry system to facilitate faster, more accurate responses. Inquiries taken by these help desks are increasing every year. At our centers where we take questions by phone in particular, we are working to add staff members and conduct education and training in order to improve the response rate and overall level of customer satisfaction.

Comments From a Staff Member at the Customer Response Center

Serving as a Liaison Point Connecting a Manufacturer and its Customers

Fumi Takamura
Customer Service Group, Mitsubishi Electric Life-Network Co., Ltd.

We, the staff at the Customer Response Center, serve as a liaison point for customers. We report the unfiltered thoughts and opinions of the customers who call us to the relevant divisions. Their comments are then incorporated into new product development activities and improvements to existing products, which plays a part in helping to improve customer satisfaction.

Customers call us with a variety of opinions and requests. I am always extremely happy when, despite us having inconvenienced a customer with a malfunctioning product or some other problem, the customer is satisfied with our response, which we deliver together with that of the relevant department, and tells me that he or she will purchase more Mitsubishi Electric products in the future. While we sometimes receive complaints, we are also at times thanked for seemingly trivial things, which remind me of the significance of the Customer Response Center. I intend to continue to respond to customers’ problems in good faith while always remembering to smile and show gratitude.

Enhancing Information Delivery—From Helpful Pointers to Safety Precautions

In addition to product-related help and repair, we also provide a wide range of information, to individual customers and sales outlets, including helpful lifestyle-related information and information on using products safely. For example, our website includes an informative site for homemakers called “Shufflé.” The site provides information on interesting products and reports from new product testers to some 160,000 registered members, and has been quite well received. In addition, we provide lifestyle-related product information and a variety of services to around 120,000 registered participants in our product registration service, which is available to purchasers of Mitsubishi Electric products.

We also launched an Internet-based repair request system in July 2005 and are continuing to work to enhance it. For example, in November 2005 we started offering a cell phone-based, self-diagnostic display function for sales outlets.

For Group companies in Japan that handle home appliances, we issue guidelines for the creation of user manuals (the most recent version was issued in April 2006) and guidelines for the creation of installation manuals, which serve to ensure the safety of installation work and product usage.

As of March 2006

Incorporating Customer Opinions into Products and Services

<table>
<thead>
<tr>
<th>Customer Help Desks</th>
<th>Internal Departments (Division Utilized)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Response Center</td>
<td>Manufacturing Divisions</td>
</tr>
<tr>
<td>Service Center</td>
<td>Confirmation of Market Quality Information</td>
</tr>
<tr>
<td>Technical Support Center</td>
<td>Confirmation of Inquiries</td>
</tr>
<tr>
<td>Customer Support Website</td>
<td>Confirmation of Requests</td>
</tr>
</tbody>
</table>

Inquiries and information analyzed and reported monthly

Purchase Consultations Document Requests

Forwarded daily via the Internet

Inquiries Responses

Service Requests Response

Technical Requests Responses

Surveys of customer satisfaction regarding repair request reception, speed of repair service, and response of service professional

Surveys of purchase circumstances and satisfaction during use

Incorporation into Products and Services

Improvements to mass produced products

Incorporation into products under development

Revisions to user manuals

Improvements to method of providing documents

Issue of technical service information

Customer Satisfaction Questionnaires

Customer Satisfaction Cards

Customers Questionnaire Card

As of March 2006
Responsibility and Conduct Toward Customers

**Topics**

**Sample Product Improvements in Fiscal 2006 Spurred by Customer Comments**

<table>
<thead>
<tr>
<th>Product</th>
<th>Customer Comment</th>
<th>Improvement</th>
<th>Applicable Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Air Conditioning Unit</td>
<td>I tried to remove the louvre for cleaning but had a hard time doing it. It did</td>
<td>Widened the gap for fingers when the louvre is in the upward position and</td>
<td>MSZ-Z28R, MSZ-G32R,</td>
</tr>
<tr>
<td></td>
<td>come off after some time, but the base of the shaft on the left side bent.</td>
<td>created more space for removing it.</td>
<td>MSZ-J38R, Others</td>
</tr>
<tr>
<td>Washer/Dryer</td>
<td>After pressing the one-push open button for the lid, it took quite a bit of</td>
<td>We reviewed the lid release angle and release time and made improvements</td>
<td>MAW-HD68Y</td>
</tr>
<tr>
<td></td>
<td>time for the lid to fully open.</td>
<td>to the force of the lid release spring and the spring parts.</td>
<td></td>
</tr>
</tbody>
</table>

**Sample Product Development in Fiscal 2006 Reflecting Customer Comments**

**Induction Heating Rice Cooker with 99.9% Pure Carbon Basin for Great Taste**

We developed the Honsumigama induction heating rice cooker in response to the many customer comments we received indicating a desire to make delicious rice every time.

As its name suggests, the inner basin is made from carbon. Lumps of 99.9% pure carbon materials fired for some 90 days at temperatures as high as 3,000°C are carefully formed one by one to create the basins. Compared to previous products, the water boils with greater intensity on high heat and heat passes fully through each and every grain, resulting in fluffy, great-tasting rice. The product was put on the market in March 2006 and has been received with enthusiasm.

**Responding to Product Problems**

When there is a report that a major problem has occurred in a home appliance product that we sell, we have a system for quickly and accurately considering and deciding on steps and measures to take, including the participation of upper management. For recalls in particular, we work on an ongoing basis to make sure all the relevant products that were sold are returned and repaired, and we apply these efforts to a wide array of sales channels.

In fiscal 2006, of the home appliance products for the domestic market, which are handled by the Mitsubishi Electric Group, there were recalls or quality problems related to a television stand for LCD TVs, a baseboard heater (panel-type electric heater), and a DVD recorder. We are currently making the necessary improvements with a goal of reaching all the products that were sold.

**Topics**

**Improvements to Make User Manuals Easy to Understand**

For our heat pump water heaters that use natural refrigerant, we made improvements to make essential safety information easier to see and easier to understand. Instructions in sections on warnings and cautions were framed for each scenario, like “In order to avoid burns!” and “When not using for an extended period.”
Industrial Products: Your Partner in Building a Safe and Secure Society

As a general electronics manufacturer, Mitsubishi Electric provides the highest level of quality in a broad range of industrial sectors. Under our slogan “Changes for the Better,” we are also actively engaged in research and development that will truly benefit society.

Fulfilling Our Responsibility of Developing Technologies that Benefit Society

The world is currently facing a variety of problems—global warming, environmental destruction, increasing populations, and aging societies. Disaster prevention and ensuring safety are also becoming more and more important. We believe that the Mitsubishi Electric Group has a responsibility to help solve these problems through its business operations. In order to actualize our intention of making “Changes for the Better,” we will utilize the intangible intellectual assets that we have developed as a general electronics manufacturer to create and provide technologies that benefit society.

For researching and developing these technologies, we will create and leverage ample intellectual assets. By sharing our R&D results and reusing them, we will seek to improve development efficiency. We also plan to take advantage of the world’s wisdom by promoting industry-academia-government partnerships with research institutes inside and outside of Japan to move research and development forward from a global vantage point.

Topics

Technology to Automatically Restore Elevators Stopped Due to an Earthquake in 30 Minutes

Mitsubishi Electric successfully developed Japan’s first technology for automatically restoring operations to elevators stopped due to an earthquake. The technology automatically diagnoses whether the elevator sustained physical damage from the earthquake, then returns it to operation if no problems are detected.

Conventionally, when an elevator would stop during an earthquake due to the functioning of a device for that purpose, a technician would have to go confirm the elevator’s safety. In large earthquakes, it would take a substantial amount of time to restore the elevator to operation, which would sometimes prevent the people trapped inside from going about their day. Given this situation, Japan’s Ministry of Land, Infrastructure and Transport requested the development of a system that would automatically diagnose conditions inside the elevator shaft and temporarily restore operation as a measure to mitigate the effects of earthquakes on elevators. The technology we developed was in response to this request.

Ensuring Driving Safety

In recent years being inside a car has become more pleasant with the advent of various information and entertainment devices, but at the same time safety while driving has emerged as a new issue. Mitsubishi Electric is working on the application of voice recognition technology to ensure drivers are not distracted by the operation of on-board information devices. Also, in the field of preventative safety, we are working to develop a technology that prevents cars from running into obstacles in front or behind by using radar to detect them as well as a system that provides safe driving support information (indication of a stopped car ahead, for example) with simple diagrams and sound and immediately puts the information on the car navigation screen.

Technology to Help Strengthen Information Security Monitoring Systems

In April 2006, we developed a technology for analyzing the signs of security attacks. The technology provides early detection of attacks by worm-type viruses newly emerged on information networks. These viruses move over the network themselves to attack computers.

Up until this point it was not possible to immediately apply effective countermeasures because of the considerable length of time between infection and detection. We are currently running viability tests on the new technology with plans to launch an information security monitoring service in April 2007.

Regenerative Braking Technology to Conserve Energy on Bullet Trains

Mitsubishi Electric has been involved in the development of a large number of systems for bullet trains since the trains first started running in 1964. Regenerative braking using power semiconductor technology is one such system. We were the first to make the system, which generates electricity every time the brakes are pressed, practically viable as a technology for conserving energy on bullet trains.

In addition to technologies for train cars, we also have a broad range of technologies that are active in the power systems and information systems of bullet trains. We plan to continue to help make bullet trains safe and comfortable.

Regenerative Braking

Brakes (Power Generated) Acceleration (Power Consumed)

Power generated through braking is used by other trains.

A “Smart Way” public-private research experiment by the National Institute for Land and Infrastructure Management and 23 private-sector companies. Safe driving support information is provided from a roadside system using dedicated short-range communication (DSRC).
Responsibility and Conduct Toward Business Partners

Suppliers, Sales Outlets, Service Companies

We will work to build and maintain good relationships with suppliers and sales outlets, and will contribute to society through an integrated supply chain.

Our Purchasing Philosophy

Mitsubishi Electric purchases a wide variety of materials and components from both overseas and domestic markets. We recognize our corporate responsibility and are eager to provide business opportunities for the communities in which we operate.

1) Easy Access and Equal Opportunity
To guarantee our customers the highest-quality products, we are constantly searching for new suppliers. We encourage manufacturers from all over the world, regardless of size, to contact us about submitting a quotation. The decision to embark on a new business relationship is made after careful consideration of three major factors: product price, product quality and delivery performance. To ensure continued high quality and efficiency, we periodically review our relationships with our partners.

2) Mutual prosperity
We believe in long-term relationships built upon understanding and trust. This will allow us to develop in concrete with one another and achieve mutual prosperity.

3) Ecological Soundness
We are interested in the materials and manufacturing processes used by our suppliers. Because we value the environment, we buy only ecologically sound products. Our mission is to satisfy the needs of people around the globe. To meet their growing expectations, we must widen and strengthen our affiliations with companies all over the world. We are seeking cooperation, not just business, and are looking for potential partners who are willing to join us in our drive toward worldwide prosperity.

Building Relationships with Suppliers from a Long-term Perspective

The Mitsubishi Electric Group regularly evaluates its suppliers in terms of quality, price, delivery, customer service, level of cooperation on environmental issues and other attributes. We purchase from suppliers with a strong overall evaluation on a priority basis in an effort to build good business relationships from a long-term perspective.

Ensuring Product Quality and Safety

The Group produces a variety of products such as nuclear power plants, devices for automobiles, home appliances and cellular phones. The standard of quality required by each customer differs, so when procuring parts and materials we establish quality standards in accordance with the requirements for each product, and work closely with suppliers to meet these standards and ensure safety.

Joint Creation with Suppliers

The Group gives the designation of “key supplier” to suppliers of key parts related to product performance and other suppliers that are especially important in the promotion of our business activities. Our partnerships with these suppliers are more involved than with regular suppliers, as they engage in joint development of parts and materials, adopt cutting-edge products, and promote value analysis. We also work with key suppliers to develop activities aimed at the joint creation of costs. Implementing value analysis in particular not only carries with it the benefit of helping lower our costs, it also helps increase the sales of suppliers and boost their technological efficiencies. Joint creation activities are indispensable to developing win-win relationships. Mitsubishi Electric and its suppliers work together to come up with value analysis proposals and other ideas for reducing costs, and ongoing efforts are made to ensure the ideas are adopted at the very start of the development process.

Communication with Suppliers

With the ultimate goal of mutual prosperity and cooperation on environmental issues and other attributes, we work to deepen understanding of our products and to provide backup for their sales and support activities. Group sales companies are responsible for day-to-day communication with our sales outlets, which involves presentations on new products as well as service and technology seminars. In May 2006, we launched a new partner website, WIN-PK. The site consolidates an enormous amount of product-related information that had been dispersed on various sites and systems, so sales outlets are now able to quickly access the product information they need.

Communication with Service Companies

Providing quick, reliable service is an essential ingredient in customer satisfaction. For this reason we have service companies participate in discussions and offer their thoughts and opinions on the serviceability and safety design features of new products. In fiscal 2006, design reviews for serviceability and safety were conducted on 17 models, and a total of nine technical seminars were held for key technical personnel at our service companies. In addition, we hold lectures on a timely basis whenever amendments are made to relevant laws, and we issue service briefs that summarize appropriate repair methods and required tools in an easy to understand manner, in order to aid service professionals in repairing breakdowns when they occur. In this way, we work together with service companies to ensure product safety and improve service quality.

WIN-PK, our new partner website.

We widely publicized WIN-PK among sales outlets by distributing a pamphlet on it.
Increasing Shareholder Value and Disclosing Appropriate Information at Appropriate Times

We endeavor to disclose and provide appropriate information on a timely basis to obtain the trust and understanding of shareholders, and are committed to increasing corporate value in a way that balances growth, profitability efficiency, and soundness.

Promoting “Balanced Corporate Management” and Increasing Corporate Value

Through promoting balanced corporate management that gives consideration to the three perspectives of growth, profitability and efficiency, and soundness, the Mitsubishi Electric Group is working to establish a robust managerial basis, achieve sustainable growth, and further improve its financial performance out of a commitment to increase its corporate value.

With respect to business development, we are promoting restructuring in line with changes in the operating environment from the three perspectives of balanced corporate management, and are working to reform and strengthen our business promotion structures by reinforcing production systems in Japan and overseas, and collaborating with outside companies. We are also engaged in ongoing measures for a stronger management structure, which involve strengthening marketing prowess, increasing productivity and quality, and enhancing development capabilities and intellectual property activities. Moreover, our VI Growth Strategy seeks to ensure growth centered on strong businesses.

The Ordinary General Meeting of Shareholders

Our ordinary general meeting of shareholders for fiscal 2006 was held on June 29, 2005 and attended by some 300 shareholders. In conjunction with our official switch to a company with statutory responsibilities, compliance, hiring and investing, including environmental considerations, our VI Growth Strategy seeks to ensure growth centered on strong businesses.

Inclusion in SRI Funds

Socially responsible investing involves verifying a company’s initiatives to fulfill its responsibilities to society before making a decision on investing, not simply evaluating a company on the basis of its financial standing and growth potential. There are various standards for socially responsible investing, including environmental considerations, compliance, hiring and labor considerations, and contribution to local communities. As of the end of May 2006, Mitsubishi has earned inclusion in the Mitsubishi UFJ SRI Fund (Family Friendly) and a number of other SRI funds.
Responsibility and Conduct Toward Employees

Workforce Diversity, Motivation and Support

Mitsubishi Electric is committed to having a diverse workforce by hiring qualified people without regard for gender, nationality or race. We will endeavor to create a workplace that provides meaningful work to each and every employee.

**Workforce Diversity**

Hiring a diverse array of people without regard for gender, age, nationality or race is essential to the ongoing business development of a multinational corporation.

Based on this thinking, Mitsubishi Electric not only complies with the Labor Standards Law and the Equal Employment Opportunity Law, it provides equal treatment to all employees regardless of nationality, creed or social status, uses the same pay scale for men and women, and determines working conditions with equal standing given to employers and workers. These employment policies also apply to Group companies.

**Aggressive Hiring and Technology Transmission to Address the “2007 Problem”**

The “2007 Problem” refers to the mass retirement of baby boomers in 2007. To address this problem, we are aggressively hiring both recent graduates and mid-career professionals. In addition, in order to ensure the skills possessed by highly experienced employees at production sites are passed on to younger technicians accompanying the company’s generational shift, we have developed a system that enables sophisticated skills to be viewed in video form over the company’s intranet and a training program that allows the skills of accomplished employees to be acquired in one-on-one settings. We have also made it possible for younger technicians to pose questions to accomplished employees over the intranet.

**Instituting a Multi-Track Personnel System to Provide Diverse Employment Formats for Older Employees**

Mitsubishi Electric instituted a multi-track personnel system in fiscal 2002, which makes diverse employment formats possible by allowing employees aged 50 and over to choose from among a variety of options. The options include financial assistance for an employee’s “second life” following retirement, a “second life” support program that provides two years of paid vacation, and extending employment up to the age of 65 through a re-employment program.

We also offer an annual “lifestyle design” training session at each of our business sites to employees turning 50 and their spouses. The sessions encourage employees to take an interest in planning the rest of their lives and designing a rewarding lifestyle by providing information on pensions and retirement benefits, social insurance, taxes, hobbies, health and other topics, and facilitating group discussions. In fiscal 2006, over 1,000 employees participated in the session.

**Creating Barrier-Free Workplaces and Employing People with Disabilities**

Mitsubishi Electric works to promote the employment of people with disabilities and to create barrier-free workplaces at its business sites to make it easy for people with disabilities to work at the company. In fiscal 2006, we installed bathrooms, handrails and elevators for employees with disabilities at our new head office building in Tokyo. Also, in fiscal 2006 we employed people with disabilities at a ratio of 2.0%, which substantially exceeded the legally required ratio of 1.8%.

**Multi-Track Personnel System from the Core Career Track (for unionized workers)**

Employees in their fifties can now choose one of three types of work style.

![Training program that allows the skills of accomplished employees to be acquired in a one-on-one setting.](image)

![Barrier-free elevator (head office building in Tokyo)](image)
Compensation System Based on Individual Job Descriptions and Performance

Mitsubishi Electric revised its compensation system in March 2004 with a view to developing a corporate culture in which employees recognize organizational targets as well as their own roles, work to raise their own value, and take on the challenge of difficult goals. Under the new compensation system, performance is emphasized more than it was in the past, with appropriate compensation given to employees who contribute substantially to management and participate actively in it, and bonuses awarded for outstanding service. In light of the anxiety some employees may feel about the new system, we fully disclose its evaluation methods and standards, conduct surveys on the functioning of the system to gauge employee opinion on it, and otherwise work to increase understanding and acceptance by employees.

We are committed to making the system function effectively by organically combining and harmonizing the three components of the system, evaluation/compensation, skills development and effective workforce utilization, in order to provide opportunities for employees to develop their own skills and advance their careers.

Dialogue with Employees on Compensation

We have established consultation desks at each business site as a means of facilitating dialogue with employees on remuneration, compensation, benefits and other related issues. There is also an avenue for contacting the head office about these issues by email or phone.

Personal interviews are also held every year to provide an opportunity for individual employees to discuss compensation and other issues with their immediate superiors.

Basic Policy on Executive Remuneration

Our basic policy on remuneration for the company’s executives (directors and executive officers) is to strike a balance between remuneration for official duties and remuneration as an incentive for raising corporate earnings over the short- to medium-term. Remuneration amounts for directors are determined after considering their duties and the company’s financial performance. Remuneration for executive officers emphasizes incentives for improving financial performance, so in addition to a fixed amount determined based on job duties and the company’s overall performance, remuneration linked to business results is also paid after considering consolidated performance and results from the business for which the executive officer is responsible. Stock options are also sometimes granted to encourage and motivate executive officers to work to raise corporate value.

Motivating Researchers with Bonuses for Employee Inventions

In line with provisions in the Patent Law, Mitsubishi Electric has established rules for the payment of bonuses for employee inventions. In return for transferring patent rights on an invention developed by an employee in the course of his duties, we pay filing and registration compensation to the employee when the patent is filed for and registered, and if the invention is utilized in a company product or licensed to another company, we pay utilization compensation to the employee.

Amendments to the Japanese Patent Law in April 2005 added requirements related to formulation of these rules.

Organic Combination of Components through Management Enhancements

Topics

Official Recognition by the Tokyo Association for the Employment of People with Disabilities

Mitsubishi Electric employees with disabilities were officially recognized by the Tokyo Association for the Employment of People with Disabilities for their studious efforts and diligence in acquiring high levels of skill.

Environmental Sustainability Report 2006
namely, deliberation with employees on formulation, disclosure of the rules to employees, and listening to employee opinions on the matter. In accordance with these amendments, we revised our rules for the payment of bonuses for employee inventions in July 2005. We then held presentations on the changes at all manufacturing works and research centers, distributed CD-ROMs of the presentation to all employees who were not present, posted the presentation on the company intranet, and listened to the opinions of employees on the matter. After deliberations with the labor union, we created a final revised version of the rules that incorporated the thoughts and opinions of employees, gave presentations on this final version at all our operating sites and gained the consent of employees.

Under these revised rules for bonuses on employee inventions, we eliminated the upper limit and raised the bonus ratio for inventions licensed to other companies in order to further motivate our engineers. We also improved fairness and transparency for inventions used only in company products by disclosing the formula used to calculate bonuses for them. Moreover, we established the Invention Consultation Committee to make it possible for employees to petition the committee to review the amount of their bonus when they are not happy with it. We explained the reasons for these changes and our related policies to the departments in charge of intellectual property issues at each of our Group companies as well, and the companies have developed systems in line with Mitsubishi Electric policies.

Apart from our system of bonuses for employee inventions, we also have a program for rewarding outstanding inventions. Under this program, 30 to 40 inventions are honored each year.

**Human Resources Development System Allows Employees to Actively and Independently Develop Their Capacities**

Mitsubishi Electric’s training system consists of passing down everyday business know-how and acumen through on-the-job training. Knowledge and skills that are difficult to acquire through on-the-job training as well as career development are provided through off-the-job training on a supplementary basis. Off-the-job training consists of conveying information on ethics, legal compliance and other matters. Exceptional teachers from inside or outside the company provide expertise and skills training, or motivational education, tests and competitions to improve skill levels are conducted, and practical training or international study opportunities at overseas sites and universities in Japan and abroad are provided. We also select outstanding employees for a managerial training program that trains individuals for the core management positions that drive our businesses.

**Self-Development Support Program**

We instituted a self-development support program in fiscal 2005 to provide support for employees who take the initiative to develop their skills. The program provides support in the form of money and time for participants in educational programs inside and outside the company and also pays bonuses to employees that have acquired certain external certifications. The program is intended to foster a corporate culture in which each and every employee independently and actively takes on the challenge of developing their skills to reach lofty goals as a professional.

**Transfer Opportunities for Willing Employees**

We instituted an intranet-based internal recruitment system in fiscal 2002 in order to optimize our human resources and provide transfer opportunities to willing employees. In fiscal 2005, we put in place a “free agent” program that publicizes the willingness of employees to be transferred. Specifically, we launched Job-Net on our intranet in fiscal 2002 to allow employees to consider career advancement possibilities on their own. The site posts information on recruitment and skill development training at Mitsubishi Electric and Group companies as well as companies outside the Group.

**Development and Penetration of Childcare Programs**

Mitsubishi Electric is working to develop workplace conditions that allow employees to both do their jobs and raise children by enhancing childcare programs and ensuring their utilization penetrates the company. Our childcare leave program can be extended to the month of March following the child’s first birthday, or until the end of September at the longest, and our program for allowing employees to work shorter days to help them raise their children can be extended up until the child finishes third grade in elementary school. In addition, when the employee is the spouse of an expecting mother, the spouse may take up to five days of special paid leave. There is also a program to provide the spouse with special paid leave for childcare in certain circumstances.

Further, we have formulated an action plan in accordance with the Law for Measures to Support the Development of the Next Generation that calls for developing a system for actively providing and disseminating programs and information related to childcare leave and returning to work following that leave. These initiatives involve establishing and enhancing a website that posts related information in order to make the existence of the programs well known among employees. We will also enhance the content of discussions between employees returning from childcare leave and their superiors in other to facilitate this process. Along with enhancing our programs, we will work to foster a workplace culture in which employees can take on both childcare and their jobs, and in which women employees are able to enhance their personal lives while advancing their careers.
Promoting Occupational Health and Safety

Mitsubishi Electric has introduced a proprietary management system for occupational health and safety and is involved in safety management activities targeted at reducing risk to zero, and a variety of initiatives aimed at managing the mental and physical health of employees.

**Occupational Health and Safety Management System Strives for Zero Risk**

From zero accidents to zero risk—Mitsubishi Electric is dedicated to developing a new culture of safety. Based on our proprietary system for managing occupational health and safety, we are enhancing our management system and promoting a variety of initiatives that include risk assessments.

In fiscal 2006, we worked to thoroughly educate managing supervisors, and accurately assess and manage each workplace using a diagnostic checklist for workplace health and safety, with a view to fostering a culture of workplace safety. In addition, we developed conditions that enable work to take place safely and established safe work methods.

**Establishing Improvement Goals and Preventing Lifestyle-related Diseases**

Since fiscal 2003 we have carried out activities under the Mitsubishi Electric Group Health Plan 21 (MHP21) for our approximately 100,000 Group employees. These activities are inspired by the slogan “Change Your Lifestyle Habits, Extend Your Healthy Years!” and involve setting company-wide improvement goals in five categories: maintaining proper body weight, creating an active lifestyle, stopping smoking, maintaining proper dental care and improving stress management skills. The degree of achievement of these goals is evaluated every three months. In addition, activities are lent vitality by yearly health surveys, campaigns throughout the year, leadership training for MHP21 promotion aimed at passing on success stories and health competitions between business divisions.

**Making Caring for Mental Health a Top Priority**

Mental health is a top priority for health management at Mitsubishi Electric. The head office and each of our business sites have a counseling program in place, which works to help employees with their everyday worries related to work and family and other emotional issues. Each business site also holds lectures on mental health, autogenic training (how to prevent stress from building up), and other related topics.

We intend to further enhance our employee assistance programs* and carry out care initiatives with a priority on overseas workers.

* EAP (employee assistance program): An employee assistance program is a system by which a company provides support for its employees’ lives in general, and their mental health in particular, in order to raise productivity.

**Workplace Environment Standards that Exceed Legal Requirements**

We understand that people spend a large part of their lives at their place of employment, so we make people-friendly enhancements to the workplace environment and promote the creation of pleasant spaces that give consideration to people with disabilities and older workers.

We have established our own workplace environment standards for air, lighting, noise and facilities that exceed legal requirements, and are working to achieve and maintain the standards. The standards include a section on regular workplaces that is targeted at business offices and a section on special workplace environments targeted at sites that handle hazardous substances and the like.

**Promoting Occupational Health and Safety Activities Recognized by the Minister of Health, Labour and Welfare**

In fiscal 2006, two Mitsubishi Electric employees received Outstanding Record of Safety Awards from the Minister of Health, Labour and Welfare in connection with our occupational health and safety activities.

This award honors foremen and managers who compile an exceptional record of safety at their worksite or department. Dissemination and transmission of knowledge and skills related to safety management by the award recipients, along with their leadership and teaching abilities, were recognized in addition to the company’s track record of safety.
Responsibility and Conduct as a Corporate Citizen

Establishing Priority Areas and Continuing Philanthropy on a Global Basis

The Mitsubishi Electric Group carries out distinctive activities that contribute to society, with management and employees working together as one.

Carrying Out Philanthropic Activities in Five Priority Areas

Mitsubishi Electric established its Philanthropy Committee in 1990 and put it under the direct control of the president. Since that time we have carried out philanthropic activities in five priority areas: social welfare, regional communities, global environmental preservation, science and technology, and sports and culture.

Philanthropy Promotion

Donating Funds

The SOcio-ROOTS Fund is a matching gift program, in which the company donates an amount equal to that donated to the fund by the employee, thus doubling the goodwill of the gift. 1,000 employees donate to the fund every year. As of March 2006, it has provided funds totaling around ¥450 million to over 920 projects and programs that include social welfare facilities and other worthy causes.

Disaster Relief Activities in Fiscal 2006

Mitsubishi Electric, Group companies in the U.S., and the Mitsubishi Electric America Foundation donated approximately $262,000 in cash and goods to hurricane relief efforts in the U.S. in fiscal 2006. We gave a total of approximately ¥2 million in monetary donations and relief provisions (50 washing machines) to help in the aftermath of the earthquake in Fukuoka Prefecture.

Philanthropic Activities Through Overseas Foundations

Through the Mitsubishi Electric America Foundation and the Mitsubishi Electric Thailand Foundation, both established in 1991, we are active in the areas of social welfare and the promotion of science and technology.

The Mitsubishi Electric America Foundation primarily provides support for young people in the United States with disabilities. Its support for an internship program at the American Foundation for the Blind was highly regarded, as we became the first Japanese company to be honored with the Helen Keller Achievement Award.

The Mitsubishi Electric Thailand Foundation provides scholarships to university students and runs a lunch support program for elementary schools. (See the features on page 20.)

Receiving the Helen Keller Achievement Award

The award is given to individuals or corporations that help improve the quality of life of people with visual impairments and to people with visual disabilities who create new ways of living.

Example of Helping the Community

We help beautify the environment in communities where we are located.

Community Activities Throughout the Group

Business sites throughout the Mitsubishi Electric Group are involved in ongoing, locally rooted activities to benefit local communities, such as cleanup activities around site premises and participation in local festivals.

~ http://www.meat.org/
Environmental Sustainability Report 2006

Co-sponsoring the IDC Robot Contest
This contest involves university students from around the world rooming together and teams of mixed nationalities competing against each other to create a robot. Mitsubishi Electric has helped sponsor the event since 2002 because we believe it plays a significant role in developing young researchers and engineers.

Tending Forests Near Mt. Fuji (Head Office)
We participate in a project sponsored by Sumitomo Forestry to revive national forests around Mt. Fuji that were damaged by a typhoon in 1996. The project allows participants to directly experience nature and provides them the refreshing pleasure of working hard in the midst of a grand natural setting near Mt. Fuji together with their colleagues, friends and family—an experience hard to come by in normal day-to-day life.

Giving Apples Harvested at the Iida Plant to Welfare Facilities (Nakatsugawa Works)
Every year in December we give apples harvested on the premises of the Iida Plant to local social welfare facilities in Nakatsugawa and Iida. Last year we were worried about the possibility of a poor harvest because of the exceedingly hot summer and the impact of successive typhoons, but the harvest was the same as a normal year in terms of color and other attributes. We were able to donate a substantial amount of apples to the delight of the recipients.

Benefit Concert for the Victims of the Sumatra Earthquake (Kanagawa Branch Office)
The Mitsubishi Electric Socio-Tech Wind Orchestra held a concert at the Kamakura Art Museum to raise funds for the victims of the Sumatra Earthquake, resulting in donations of ¥230,556. The money was donated through the Japanese Red Cross Society under the name of the audience as a whole.

Representing the Company and Providing Aid in the Aftermath of the Niigata-Chuetsu Earthquake (Kanetsu Branch Office, Niigata Branch)
To help those impacted by the Niigata-Chuetsu Earthquake, which struck on October 23, 2004, we provided ¥10 million in monetary aid and 400 kerosene heaters to Niigata Prefecture’s disaster response organization. In addition, the Mitsubishi Electric SOCIO-ROOTS Fund matched the ¥11.74 million in donations given individual employees to provide a total of ¥23.48 million.

Exhibiting the Art of People with Physical Disabilities Throughout Japan (Mitsubishi Electric Building Techno-Service Co., Ltd.)
We have held exhibits of art created by people with physical disabilities from around the world since 1994 in conjunction with the Mouth and Foot Painting Artists association. The exhibits are intended to deepen the understanding of people with disabilities and help them lead independent lives. The exhibits are managed by volunteer employees and their families, and proceeds from sales of related items are donated to local facilities for people with disabilities.

Supporting Educational Projects at the National Museum of Science and Technology Leonardo da Vinci (Mitsubishi Electric Europe, B.V. (Italian Branch))
The Italian Branch of Mitsubishi Electric Europe is an official partner of the National Museum of Science and Technology Leonardo da Vinci. A permanent robotic exhibit that opened in October 2005 displays robots that replicate the technologies devised by Leonardo da Vinci as well as robots built by Mitsubishi Electric.

Sending Aid to the Victims of Hurricane Katrina
(Mitsubishi Digital Electronics America, Inc.)
Some $35,000 was provided by the Mitsubishi Electric America Foundation to the American Red Cross and another $10,000 was given to the Disability Funders Network disaster relief fund for people with physical disabilities. Additionally, we delivered food, blankets and other daily necessities collected by employee volunteers and donated 16 plasma televisions to schools on the Mississippi Gulf Coast.

Exhibiting the Art of People with Physical Disabilities in Germany Purchase a Vehicle (Mitsubishi Electric Europe, B.V. (German Branch))
The German Branch of Mitsubishi Electric Europe provided funds for the purchase of a vehicle by the Helen Keller School, a school for children with disabilities in the suburbs of Dusseldorf. The vehicle is used to transport children to and from the school, and for school trips. The children themselves were delighted to be able to move from place to place more easily than before.
Communication Through Direct Interaction and Dialogue

We take advantage of a variety of opportunities to engage in corporate communication activities in order to build better relationships with the public.

Exhibits and Events

Eco-Products 2005 (December 2005)
As the Kyoto Protocol has gone into force and awareness of the need to prevent global warming is growing, we presented energy-saving products and solutions in a broad range of fields from consumer to industrial under the slogan: “Global Warming Prevention by Mitsubishi Electric Right Now and Everywhere.”

Our exhibit had an area where visitors were able to measure, detect, try their own countermeasures and otherwise enjoy hands-on experience of our energy-saving solutions. It also featured our proprietary, environmentally beneficial technologies, including plastic recycling technologies. These features drew considerable attention to our booth.

Environment Week (June 2005)
The theme of this third Environment Week was, “Things I can do now to help prevent global warming.” We encouraged the public’s participation by displaying environmentally-conscious products and introducing “Cool Biz” clothing and other Team Minus 6% activities, a national program to help prevent global warming.

On the final day, Kentaro Doi from the Ministry of the Environment came to lead a discussion on preventing global warming. Mr. Doi heads the Lifestyle Policy Office Climate Change Policy Division.

With the Team Minus 6% campaign being rolled out by the government to help Japan realize the goal of reducing carbon dioxide emissions by six percent—a goal that it declared to the world in the Kyoto Protocol—we widely promoted the stance of the Mitsubishi Electric Group on environmental protection through development of various environment-related advertisements for newspapers, magazines and television.

In the Asia region, primarily Singapore and Thailand, since 2005 we have run environment-themed advertisements with the catch phrase, “Comfort meets Ecology—Eco-Products and Eco-Technology that are People-Friendly and Earth-Friendly.” In Japan we published a series of corporate advertisements with the slogan, “Surprising Technology,” mainly in nationwide newspapers, which promoted the Group’s broad range of technologies involved in helping create a better society.

CEATEC Japan 2005 (October 2005)
We exhibited state-of-the-art digital audio/video technologies and products under the theme “Digital AV Networks-Towards the Next Stage”

Large numbers of visitors got the opportunity to directly experience the impressive video of a Diamond Vision large video display system.

Advertising and Publicity

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Publishing an Environmental Report for Children and a Version in Thai
We published an environmental report for children called “Let’s start from MET,” out of a desire to engage children and let them understand the environmental activities of the Mitsubishi Electric Group. In 2005, the Eco-Products International Fair was held in Thailand, so we also put out a version of the report in Thai and passed it out to the many visitors.

Communication with the Public

Exhibits and Events

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Comments from Shufflé Members Visiting Our Eco-Products Exhibit

The Otsukas from Tokyo

• Mrs. Otsuka
Up until now, I thought that environmental protection meant improving things like automobile emissions and discharge by factories. But at this exhibition I learned that much work is being done to lessen the amount of carbon dioxide given off by home appliances and that I am able to help protect the environment as a part of my daily life.

• Takuya Otsuka (Son)
There was an experiment in which you could pedal a bicycle to create electricity and power a light bulb. I tried pedaling the bike myself and after about 17 seconds the light bulb turned on. I tired myself out, but I learned that that was only enough to light a 100 watt light bulb for one minute and realized just how hard it is to create electricity.

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Clean Japan Center
“Awards for Resource-Recycling Technologies and Systems”
Clean Japan Center Chairman’s Award
Mitsubishi Electric established Hyper Cycle Systems Co., Ltd. in 1999 as the industry’s first recycling plant. It has since been working to reduce final disposal by recycling home appliances. The award recognized the efforts of our home appliance recycling plants toward the achievement of a 100% recycling rate through effectively utilizing waste plastic and making advanced developments that enable refrigerant chlorofluorocarbon to be used in refrigeration processing.

Recycling Technologies and Systems Award:
Awards for Resource-Recycling Technologies and Systems:
Commissioned by the Ministry of Economy, Trade and Industry, the Clean Japan Center widely invites, develops and honors projects and initiatives that contribute to the reduction, reuse and recycling of waste in order to encourage and promote such activities. This awards program has the longest history in Japan among awards programs associated with recycling.

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Opinion from an Independent Party

We have solicited the opinion of a prominent expert to verify whether or not we are meeting the disclosure requirements expected by the stakeholders. This objective assessment will be used in our future activities and in preparing future versions of this report.

Comments on the 2006 Environmental Sustainability Report

Tsuneo Matsumura
Professor, Chuo Graduate School of Accounting, Chuo University

This report does not simply combine an environmental report and a social report. It is heavy on environmental information, but the articles on social responsibility left a stronger impression than last year. The report provides the whole truth in that it reveals the company’s weaknesses, reports on past events as well as goals for the near future. I read it with an interest in how Mitsubishi Electric is conveying its current situation, and to sum up, the report provides more information than last year and the amount conveyed to readers with different perspectives was increased. However, perhaps due to page restrictions, the font was too small in places. I also have the following comments on individual sections.

The section explaining that the company’s corporate missions and guiding principles have been carried on since its establishment indicates that the core of the company has not changed and that its role as a public institution has been steadfastly maintained. Can it be said then that this is proof that the pursuit of shareholder value alone is not recognized by society?

In the section on governance, risk management, compliance and information security, establishing and maintaining systems is important. The disclosed failures can be read as declarations in place of a cure. I expect to see mention of the number of years the systems have been maintained.

In the sections on environmental facilities, facilities for environmental measurements, and eco-products, I came away with a sense for the technological prowess of Mitsubishi Electric. I was able to clearly see that many products are considered in terms lifecycle assessments, green procurement and the three R’s from manufacturing to use, disposal and recycling. Also, for carbon dioxide reduction, there is reporting on results at manufacturing, shipping and other stages. I would like to see Mitsubishi Electric continue to lead the industry in this area.

“Uni” for home appliances refers to design that makes the appliance easy for many people to use, but there is a sense that “Uni” loses out to “Eco,” which it is promoted together with. “Larger” and “easier to view” are some descriptors that are used, but there is no mention of what the comparisons are to, and there are minimal pictures and text. I would like to see a few clear examples in next year’s report.

With regard to overseas business activities, this year’s report introduces companies in Thailand. This makes me wonder, though, why a global corporation would only present its companies in Thailand. However, the articles on workplace communication, reducing environmental impact and donating to foundations enabled me to learn about the three companies as if I had visited them.

The pages introducing initiatives related to the environmental management system indicate that the company has met the updated ISO 14001 standards (2004 versions) and that it was found compliant by the renewal audit. The audit looks at whether a company’s environmental management system, which serves to comprehensively satisfy the requirements of the standards on an ongoing basis, is being appropriately implemented and maintained. Because Mitsubishi Electric is a general electronics manufacturer, I understand office work to entail directing resource and energy conservation efforts at factories, promoting green procurement and providing funds for capital investments. It is not “paper, garbage and electricity.” Despite the length of the article, reading between the lines had me thinking that in actuality the people spearheading office initiatives faced substantial difficulty.

The environmental accounting section provides data in accordance with the guidelines, but it is difficult to make any judgments without comparisons over a number of years.

In Japan, environmental reports have come first and even now there are individual differences among companies. There is also variety in social reports, which have followed. I think the task of combining the two tests the mettle of the editors.
It was our goal this year to create a distinctive report. However, social reports and environmental reports attract different types of readers with differing needs, so we faced a number of difficulties in meeting their respective requirements in one report. The total number of pages increased from the previous year, but reporting was necessary from each perspective of the triple bottom line, so we felt that this page increase was unavoidable. Making an intimate, straightforward report that enables large numbers of people to learn something of Mitsubishi Electric and fulfilling social and environmental responsibilities was the major theme of this report. We again realized that coming up with one solution to many numbers of people to learn something of Mitsubishi Electric and fulfilling social and environmental responsibilities was the major theme of this report. We again realized that coming up with one solution to many