# The Panasonic Report for Sustainability 2006

Matsushita Group





### Matsushita Group Business Structure

(As of April 1. 2006)

#### Global & Group Head Office Semiconductors Semiconductor Company PEAKS engine (System LSI for digital TVs) Components & Devices/Production Systems VENUS engine (System LSI for digital cameras) Batteries Matsushita Battery Industrial Co., Ltd. Panasonic Electronic Devices Co., Ltd. Electronic components Film capacitor for HEV Electric motors Motor Company Panasonic Factory Solution Co., Ltd. Matsushita Welding Systems Co., Ltd. Factory automation (FA) Angular rate sensor Display devices Panasonic AVC Networks Company Digital Networks Plasma TV AVC Panasonic AVC Networks Company VIECA Fixed-line communications Panasonic Communications Co., Ltd. Mobile communications Panasonic Mobile Communications Co., Ltd. Automotive electronics Panasonic Automotive Systems Company Digital camera LIMIX System solutions Panasonic System Solutions Company Appliances & Environmental Systems Home Appliances Group Matsushita Home Appliances Company Matsushita Refrigeration Company Healthcare Business Company Home appliances and healthcare systems Air conditioner with a built-in automatic filter cleaning svstem Lighting Company Lighting Tilted drum washer/dryer Environmental systems Matsushita Ecology Systems Co., Ltd. Corporate eNet Business Division Matsushita Logistics Co., Ltd. Matsushita Technical Service Co., Ltd. Services & Solutions Panasonic Shikoku Electronics Co., Ltd. Matsushita Electric Works, Ltd. PanaHome Corporation Modular kitchen system FiTi

#### Front cover

The Eco & Ud HOUSE is a life-size model house that embodies and presents Matsushita's concept of Creating Value for a New Lifestyle. "Eco" stands for "ecology (Coexistence with the Global Environment)"; "UD" stands for "universal design," which ensures ease of use for all people, regardless of age or physical ability.

Victor Company of Japan, Ltd. (JVC)







PanaHome EL SOLANA

can be found on page 48.

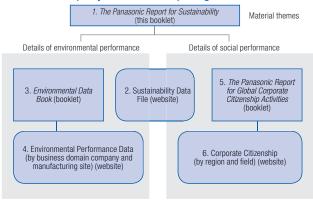
## The Panasonic Report for Sustainability 2006

Matsushita Group

### Information on Matsushita Group's **CSR** management

The Matsushita Group provides information on corporate social responsibility (CSR) under the reporting system diagrammed below, with the aim of accurately representing its corporate activities and seeking public understanding of the initiatives it undertakes to help build a sustainable society. Also, Matsushita intends to provide a platform for interactive communication with all stakeholders, which it believes will help improve its corporate management strategies.

#### Matsushita Group's system for CSR Reporting



- 1. The Panasonic Report for Sustainability (this booklet): Focuses on material themes of CSR management.
- 2. Sustainability Data File (website): Detailed reports on environmental and social performance panasonic.net/report/data file/
  - Detailed data for fiscal 2006 will be available in October 2006.
- Environmental Data Book (booklet): Detailed information on environmental activities
  - Detailed data for fiscal 2006 will be available in September 2006.
- Environmental Performance Data (website): Reports on environmental performance at each business domain company and manufacturing site panasonic.net/eco/data/
- 5. 6. The Panasonic Report for Global Corporate Citizenship Activities (booklet) and Corporate Citizenship (website): Detailed information on corporate citizenship activities www.panasonic.co.jp/ccd/en/pdf/ccd\_e.pdf

#### Inquiries

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For online inquiries, please go to panasonic.net/csr/eng.html Date of Issue: July 2006

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#### Reference guidelines

- The Japanese Ministry of the Environment's Environmental Reporting Guidelines 2003
- The Global Reporting Initiative (GRI)'s Sustainability Reporting Guidelines 2002

Scope of this report

Reporting period: The performance data are principally from fiscal

2006 (April 1, 2005-March 31, 2006). Some fiscal 2007 activities are also included. The abbreviated year indication in graphs (e.g., "01" for fiscal 2001) means the fiscal year (April 1-

March 31).

Organizations covered: Matsushita Electric Industrial Co., Ltd. and

affiliated companies inside and outside Japan

(Matsushita Group).

Target data: Data are mainly from the consolidated group

of companies. Environmental performance data are from all manufacturing sites that have established environmental management

systems.

### Message From Management

### On the issuance of *The Panasonic Report for Sustainability 2006*



Kunio Makamura

### Our mission

- Contributing to Society through Our Business -

In the 21st century, we are witnessing unprecedented changes in our society, most notably the progress of science and technology and the rapid advance of economic globalization. At the same time, we are confronted by various challenges, such as global environmental degradation and the depletion of natural resources. In this context, I believe it is a common mission of all people in the world to realize a sustainable society. At Matsushita, we are committed in our day-to-day activities by consistently recalling this mission. For the early 21st century Matsushita has adopted the following twin business vision: "Realizing a ubiquitous network society" and "Coexistence with the global environment" using our cutting-edge technologies. It is our sincere hope to help resolve some of these global problems through our commitment to our core business as an electronics manufacturer.

Matsushita's twin business vision

Realizing a ubiquitous network society

Coexistence with the global environment

#### Realizing a ubiquitous network society

The term "ubiquitous network society" refers to a society where people will be able to access information anywhere and anytime. The digital consumer electronics business, in which Matsushita is a leading company, is helping realize such a society. In April 2006, for example, one-segment digital TV broadcasting commenced in Japan. It is a new and

promising digital terrestrial broadcasting service that is rapidly spreading across Japan. Through this service, Japanese consumers can now enjoy crisp moving digital images on their mobile communications equipment, such as mobilephones, portable DVD players, and car navigation equipment, as well as on plasma and other large-screen digital TVs. To link such digital consumer electronics products, SD memory cards and other compact recording media are currently in use, which offer ease of use and convenience. In addition, Matsushita will launch a power line communication (PLC) system, which the company has long been studying and developing. Using this new PLC system, users will be able to connect various kinds of compatible equipment simply by plugging them into power outlets. Moreover, remote control from a distance will be available via the Internet. To help realize a ubiquitous network society, Matsushita intends to develop these advanced networking technologies together with system LSIs, which are the key components of sophisticated digital equipment. We also hope to enhance our capacity to implement systems for businesses and public facilities. Our ultimate goal is to benefit all our customers worldwide through our efforts to offer dreams and excitement by providing AV equipment, to ensure people's safety and security by developing effective systems, and to promote wider use of our products in educational and medical treatment facilities.

### Coexistence with the global environment

Our greatest task in the 21st century is to achieve a coexistence with the global environment, by overcoming various challenges, including global climate change, the depletion of natural resources, and contamination by environment load substances. Although Japan is a country of mild climate and abundant natural blessings with 70% of its national land covered by forest, Japanese people experienced serious pollution, unparalleled in the world during the period of high economic growth (mid-1950s to early-1970s). To overcome this pollution, the Japanese government, private enterprises, and a great number of people have made concerted efforts, which have resulted in the development of the most advanced environmental technologies in the world. As a Japan-based electronics manufacturer, Matsushita hopes to contribute its expertise in the efforts being made to resolve such environmental challenges. We are seeking to develop technologies that enable us to maintain the present high living standards and even improve the quality of life, while at the same time reducing the consumption of both resources and energy. By achieving this goal we hope to contribute to people's lives in both developing and developed countries. To this end, we strive to minimize the impact that our business activities have on the environment, including physical distribution, marketing, and services, as well as the manufacturing activities at our plants, which are located all over the world. In manufacturing, we will dynamically promote the development of "Green Products," products featuring high energy efficiency, while at the same time thoroughly carrying out the "3Rs": Reduce, Reuse, and Recycle resources. In addition, we will promote the use of fuel cells, which Matsushita launched in 2005. Since the fuel cell is a promising candidate as one of the next-generation clean energy sources, by extending the cell's service life and lowering its price, we plan to promote its use, thus expanding the scope of our environmental commitment to encompass clean energy creation, as well as energy conservation. Moreover, Matsushita will

To Our Stakeholders

### On the issuance of The Panasonic Report for Sustainability 2006

strive to promote environmental preservation through the effective use of ubiquitous network technology. A striking example of this commitment is the promotion of electronic toll collection (ETC) system. Since drivers of vehicles equipped with ETC system need not stop their cars to pay the toll, the system is effective in reducing emissions, as well as gas consumption.

### Promoting universal design

The introduction of advanced functions and cutting-edge IT technologies in home appliances does not in itself always satisfy customers. Increasing numbers of our customers complain that their home appliances have so many functions that they cannot use them fully. In response, Matsushita is committed to the development of universal design (UD) products, which are easy to operate by all people including the elderly and people with disabilities. In developing such UD products, we place priority on making operations easily understandable, using easy-to-understand indications and expressions, and providing users with stress-free postures and movements, etc. As examples of such products that have distinguished functions, our tilted-drum washer/dryer, fax machine with voice guidance, and air conditioner with automatic air filter cleaning system have been well received by customers. We will continue to develop UD products by considering what is really needed by our customers when they are actually operating them. Since more and more consumer electronics will be networked, I believe that we must develop UD products and systems that incorporate our cutting-edge technologies, and that simultaneously feature user convenience and ease-of-use. This is vital for realizing a ubiquitous network society. Moreover, we believe that our company must take the initiative in promoting such UD

products in order to build a universal society where every community member can live in comfort and with an enhanced sense of security.

In January 2006 Matsushita opened its Eco & Ud HOUSE in the Panasonic Center TOKYO, located in Ariake, Tokyo. The Eco & Ud HOUSE is a life-size futuristic model house that embodies and presents Matsushita's concept of "Creating Value for a New Lifestyle." The house, featuring environmentconsciousness and universal design, is the crystallization of technologies developed by each group company, including Matsushita Electric Industrial Co., Ltd. Matsushita Electric Works, Ltd., and PanaHome Corporation. In this house, we intend to ask visitors to provide their impressions and views of the house and the products installed there, so that we can develop future products and services by reflecting their viewpoints. By listening to our customers we hope to offer value to them while staying closely linked to their lifestyles.



### Fulfilling our social responsibility with utmost sincerity

About 25 years ago, our founder, Konosuke Matsushita, defined corporate social responsibility as follows:

- 1. Ensure that the main work of the company helps to improve society and contributes to the well-being of the people.
- 2. Make a fair profit from the business activities of the company and make sure that the profits, in one form or another, go back to the nation and its people.
- 3. Always be certain that every process involved in the activities of the company supports the goals of a healthy society.

Our global brand slogan "Panasonic ideas for life" represents the commitment of all our employees worldwide to supplying products and services based on valuable ideas that can enrich the lives of people around the world—ideas exemplifying "ease-of-use and convenience," "safety, sense of attachment, and sense of security," and "dreams and excitement." Working alongside our customers around the world, we will strive to make a contribution to society through our business activities. Through these endeavors we intend to develop Matsushita into a globally excellent company by 2010.

To date, we have been committed to corporate citizenship activities in various areas, including the environment, education, and welfare. We will continue such activities by constantly identifying a variety of true social needs and considering what we can do as a company, as individual employees, and as responsible global citizens in the 21st century.

To carry out these commitments, I believe it essential to carefully ponder the key concept of our business philosophy—a company is a public entity of society—and to seriously review whether or not our business activities truly meet the widest social needs. I have taken every possible opportunity to encourage my fellow employees to work to ensure a "super honest Matsushita Group." To this end, senior executives, including myself, must take the initiative in building a highly ethical corporate culture, further improving the transparency of our business activities, and developing ever closer ties with society.

Lastly, in preparing this report, we have made efforts to honestly present our corporate activities as they really are. We look forward to receiving your frank opinions about Matsushita's business and to reflecting them in the management of the entire Matsushita Group. In closing, I would like to take this opportunity to thank you for your interest in Matsushita and for your continued understanding and support.

(Kunio Nakamura was elected as Chairman of the Board on June 28, 2006)



### Financial Performance by Segment

### AVC NETWORKS



### HOME APPLIANCES



### COMPONENTS AND DEVICES





## Business domain companies and group companies (as of March 31, 2006)

Panasonic AVC Networks Company Panasonic Communications Co., Ltd. Panasonic Mobile Communications Co., Ltd. Panasonic Automotive Systems Company Panasonic System Solutions Company Panasonic Shikoku Electronics Co., Ltd.

## Business domain companies and group companies (as of March 31, 2006)

Home Appliances Group
Matsushita Home Appliances Company
Matsushita Refrigeration Company
Healthcare Business Company
Lighting Company
Matsushita Ecology Systems Co., Ltd.

## Business domain companies and group companies (as of March 31, 2006)

Semiconductor Company Matsushita Battery Industrial Co., Ltd. Panasonic Electronic Devices Co., Ltd. Motor Company Others

### Main products

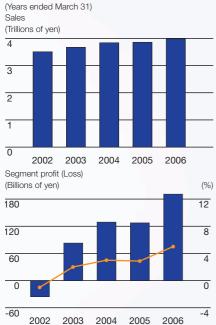
Plasma, LCD and CRT TVs, DVD recorders/players, VCRs, camcorders, digital cameras, compact disc (CD), Mini Disc (MD) and Secure Digital (SD) players, other personal and home audio equipment, SD Memory Cards and other recordable media, optical pickup and other electro-optic devices, PCs, optical disc drives, copiers, printers, telephones, mobile phones, facsimile equipment, broadcast-and business-use AV equipment, communications network-related equipment, traffic-related systems, car AVC equipment, etc.

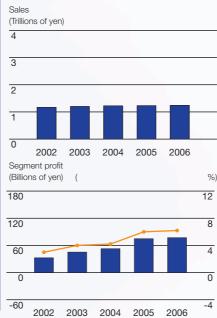
### Main products

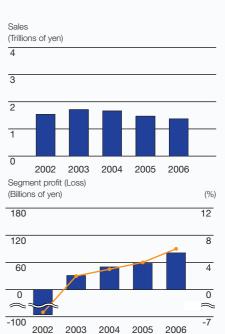
Refrigerators, room air conditioners, washing machines, clothes dryers, vacuum cleaners, electric irons, microwave ovens, rice cookers, other cooking appliances, dish washer/dryers, electric fans, air purifiers, electric and gas heating equipment, electric and gas hot water supply equipment, sanitary equipment, healthcare equipment, electric lamps, ventilation and air-conditioning equipment, car air conditioners, compressors, vending machines, medical equipment, etc.

### Main products

Semiconductors, general components (capacitors, modules, circuit boards, power supply and inductive products, circuit components, electromechanical components, speakers, etc.), electric motors, batteries, etc.







Notes 1. Under the collaboration with MEW, the Company reorganized business and sales channels in such areas as electrical construction materials, building equipment and home appliances. Accordingly sales results of fiscal 2005 for the Home Appliances and MEW and PanaHome categories have been reclassified to conform with fiscal 2006 sales results for those product categories.

### **MEW AND PANAHOME**





### JVC



### OTHER



#### Business domain companies and group companies (as of March 31, 2006)

Matsushita Electric Works, Ltd. PanaHome Corporation

#### Business domain companies and group companies (as of March 31, 2006)

Victor Company of Japan, Ltd.

### Business domain companies and group companies (as of March 31, 2006)

Panasonic Factory Solutions Co., Ltd. Matsushita Welding Systems Co., Ltd. Others

### Main products

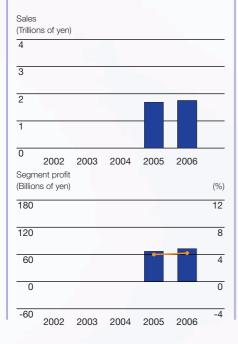
Lighting fixtures, wiring devices, distribution panelboards, personal-care products, health enhancing products, water-related products, modular kitchen systems, interior furnishing materials, exterior finishing materials, electronic and plastic materials, automation controls, detached housing, rental apartment housing, medical and nursing care facilities, home remodeling, residential real estate, etc

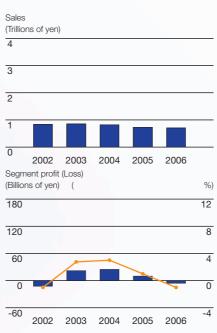
### Main products

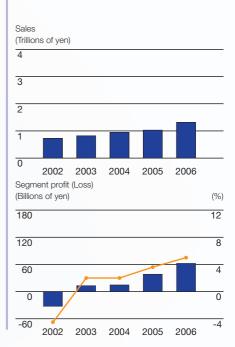
LCD, rear projection, plasma and CRT TVs, VCRs, camcorders, DVD recorders/players, CD/DVD/MD audio systems and other audio equipment, car AV equipment, business-use AV systems, motors and other components for precision equipment, recordable media, AV software for DVD, CD and video tapes, AV furniture, etc.

### Main products

Electronic-components-mounting machines, industrial robots, welding equipment, bicycles, imported materials and components, etc.







Notes 2. Sales composition for each segment includes intersegment transactions.

### **Corporate Governance**

### Fulfilling our responsibilities as a Public Entity of Society



Also in the Sustainability Data File:

Basic Business Philosophy (Basic Management Objectives,
Company Creed, Seven Principles)
Code of Conduct
Corporate Governance

### Matsushita Group management philosophy

#### Basic Business Philosophy

#### **Basic Management Objective**

Recognizing our responsibilities as industrialists, we will devote ourselves to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world.

Matsushita's corporate mission is based on the concept of corporate management established by its founder, Konosuke Matsushita, "A company is a public entity of society." More precisely, a company belongs not only to specific individuals or shareholders but also to all of its stakeholders, including customers; in other words, a company belongs to the whole of society. As the basis of our corporate activities, we must contribute to society through its business as a public entity. In 1932, the founder expressed his determination to all employees that a manufacturer's true mission is to eliminate poverty by making daily necessities available to everyone, as inexpensively as possible, based on his perception that human welfare consists of both physical and spiritual affluence. He continuously called for us to adhere firmly to the "customer-comes-first" principle, to "start fresh everyday" and to continue to provide value to society. Only in this way can a company conduct sustainable business activities for the benefit of society.

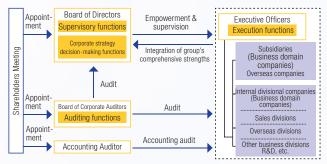
These ideas have been inherited as the Matsushita Group's management philosophy and serve as the foundation of all of our activities.

### Corporate governance

In fiscal 2004 Matsushita restructured its business operations to transform itself into a business domain-based organization based on our management philosophy (page 1; for further details, refer to the Sustainability Data File).

Figure 1: Corporate governance structure

Functions of Board of Directors, Executive Officers, and Board of Corporate Auditors



### Promoting Corporate Social Responsibility (CSR)

In October 2003, the CSR Office was established to promote our CSR initiatives. Matsushita's fundamental policies concerning CSR are as follows:

- Promotion of CSR is nothing less than the implementation of our management philosophy.
- (2) CSR initiatives should be promoted by all divisions and employees under the leadership of top management.

To put these policies into practice, the stances of all divisions of the group on the promotion of CSR initiatives were unified by the Matsushita CSR Board, chaired by the President. The CSR Promotion Committee, comprising approximately 30 members, chaired by the Executive Officer in charge of CSR and including staff members from each job function and overseas divisions, has monitored the eight major constituents of the company's CSR performance from eight perspectives (Figure 2). Problems identified from the CSR viewpoint have been resolved through cooperation among the relevant divisions.

Figure 2: Matsushita's CSR constituents



### Complying with the Matsushita Group Code of Conduct

Matsushita undertook a second revision of its Code of Conduct in 2005 in order to incorporate a CSR viewpoint into its business operations and to apply this viewpoint more thoroughly to group-wide operations across the world. Currently, the revised Code of Conduct is utilized by approximately 330,000 group Directors, Executive Officers, and employees, in 21 different languages.

Business domain companies and subsidiaries formally adopt the Code of Conduct through a resolution by the Board of Directors, then appoint Directors and Executive Officers in charge of ensuring observance of the Code, and conduct initiatives to ensure compliance, such as through systematic training sessions. In December 2005, Matsushita sent out questionnaires to employees in Japan (more than 60,000 replies were received) in order to determine compliance with the Code of Conduct. We are making use of the results of the survey to organize more effective educational and training programs and to plan specific measures for more rigorous compliance and implementation of the Code.

### Global and group risk management initiatives

Matsushita has consistently implemented risk management programs in day-to-day operations in accordance with its business plan management system. However, with the enforcement of the Sarbanes-Oxley Act in the U.S., and the enactment of the new Corporate Law in Japan, demands for stricter internal control by companies, including risk management, have been growing. In response, Matsushita has promoted a cycle for risk management activities, appropriately geared to its business operations. This risk management cycle is used to collect and assess risk information gathered through the company's global network in an integrated and comprehensive manner to ensure achievement of its business objectives (Figure

To this end, the company established the Global and Group (G&G) Risk Management Committee in April 2005, consisting of Directors and Executive Officers representing the related job functions and divisions. The company also established the Corporate Risk Management Office under the direct control of the President to function as the Committee's secretariat. Similar committees were also established in business domain companies and affiliated companies. These arrangements are designed to establish a global structure capable of responding appropriately to risks in group-wide operations.

Specifically, risks are assessed by all business domain companies, affiliated companies and related job functions, in conjunction with the formulation of business plans. In addition, the G&G Risk Management Committee also assesses risks and determines the severity of such risks. Risks that the Committee judges as having the higher priority will be dealt with by business domain companies and related job functions rapidly and accurately. In fiscal 2006, the Committee picked out nearly 3,000 risk scenarios, consolidated them and identified the corporate major risks. At business domain companies, development and implementation of this system as well as responses to major risks are monitored to continuously improve the system.

Matsushita pinpoints risks that might hinder our business operations and responds to them appropriately through this framework. This is to ensure safety and security for all

Figure 3: Risk management efforts linked with business management



our stakeholders, including customers, local communities, shareholders, business partners, and employees, as well as to achieve our business objectives and secure stable business growth.

### Implementing Business Continuity Management (BCM) initiatives

In recent years, large-scale disasters have frequently occurred throughout the world. In response, business continuity guidelines were developed by the Central Disaster Prevention Council of the Cabinet Office in Japan. Companies are also required to establish stronger business infrastructures that can withstand disasters.

Matsushita has promoted Business Continuity Management not only to promote safety and security for people, but also to fulfill its responsibilities in restoring business operations promptly and providing essential products and services to customers in the event of a disaster.

From fiscal 2006, we have been conducting earthquake-resistance inspections at model business units, in anticipation of inland earthquakes caused by fault rupture and the Tonankai earthquake. Based on survey results, we established company-wide guidelines for setting target recovery periods, and to promote advance measures to reduce damage and secure alternative facilities and alternative suppliers of materials.

#### In-house hotlines

As a system to ensure an open and transparent corporate culture, Matsushita established a Global Business Ethics Hotline and a Reporting Procedures by the Board of Corporate Auditors in July 2005, in addition to the existing Business Ethics, Fair Trade, Women's, and Fair Business hotlines. In total, Matsushita now operates six hotlines at its head office. Furthermore, business domain companies, subsidiaries, and regional headquarters in North America and Europe have established and operate their own hotlines

These hotlines serve as a means of accepting reports and providing advice when employees encounter a situation that might pose problems or create questions about the company's business activities. The hotlines function beyond the corporate hierarchy and accept reports and requests for advice from various countries and regions in order to resolve problems as quickly as possible.

### At a Glance of Fiscal 2006

### Fully understanding our actual status to evolve CSR activities

### Achievements in fiscal 2006 (summary)

Efforts concerning the social aspects of Matsushita's CSR activities were previously promoted mainly by the head office divisions, such as the Legal, Personnel, and Information Security divisions. In fiscal 2006, however, we established the Matsushita CSR Board, which includes executives of business domain companies, chaired by the President, to launch company-wide CSR efforts. The Board's initiatives are developed from a viewpoint of promoting advanced programs linked with business activities.

As for its environmental responsibility, fiscal 2006 marked the year of the mid-term targets of Matsushita's Green Plan 2010, announced in 2001. In this regard, the year was significant also for us in taking a step further towards achieving greenhouse gas (GHG) Factor 5 for One Household.

Matsushita places emphasis on employee education and dialogues with stakeholders in both social and environmental aspects of CSR activities.

### Enlightening activities for all employees

From April to June 2005, an exhibition, "Matsushita Konosuke and CSR," was held in the House of History of the head office. The founder's ideas on CSR and CSR practices were introduced at the exhibition. Subsequently, five exhibitions took place around the country and approximately 15,000 people visited these exhibitions. Many of our employees deepened their understanding of CSR. Details of these events are reported on the company's website, both in English and Japanese.

Matsushita has been involved in "Team -6% campaign," launched by the Ministry of the Environment in April 2005. Through participation in the "COOL BIZ" campaign and the "Black Illumination" event (a lights-out campaign on day of summer solstice), environmental responsibilities could be shared by all employees. We have continued our own lights-out campaigns since then.

Since November 2005, a monthly CSR News (an awareness-raising publication available both in English and Japanese) has been issued to all employees, based on the concept of "understand CSR and change your behavior." CSR News has been useful in highlighting the importance of CSR in an easy-to-understand manner for all employees.



"Konosuke Matsushita and CSR" http://panasonic.net/csr/matsushita/



### Dialogues with stakeholders

Matsushita provided wide-ranging opportunities for dialogues with stakeholders in order to receive feedback on its CSR activities. Some of our stakeholders' comments are given below.

#### Dialogue with experts with regard to CSR reporting

We asked for opinions on the last year's report from experts in various

- Investors are interested in whether CSR efforts help to boost the competitiveness of a company. (SRI rating organization)
- → This year's report informs Matsushita's business operations in relation to global issues (pages 46-60).
- The report should contain levels of achievements in comparison with objectives (an audit corporation).
- → The table on page 12 shows achievements and challenges of the CSR constituents.

#### Meeting with experts concerning lifestyles for the new age

We hosted a round table discussion between a total of 23 experts and journalists and top officials of Matsushita at the Eco & Ud HOUSE in November 2005 (see cover and page 48).

- A participant wants solutions that use more natural materials and proposals that take into account landscapes and local communities.
- → Matsushita would consider such issues in Factor 5 Project in the fiscal

Website meeting with readers on Matsushita's business operations We hosted a trial website meeting over the Internet. For this meeting, we called for readers of the Panasonic Report for Sustainability 2005, selected at random from all over the country, to participate in the meeting.

- It is important for the company to promote awareness of CSR in each
- → Matsushita now regularly issues a bulletin, CSR News (both in English and Japanese).

#### Dialogue with labor union officials

We hosted a meeting to read the report with eight labor union officials of Panasonic AVC Networks Company to deepen the mutual understanding of Matsushita's CSR efforts.

- · With an accurate understanding of the social significance of company-wide CSR efforts through reading the report, each union member can take pride in their duties. We would like to organize similar events for workplace meetings (labor-management meeting conducted for each section).
- → Labor and management confirmed that both parties would cooperate in the promotion of CSR initiatives.

#### Participation in the Global Reporting Initiative (GRI)

In 2004, Matsushita became an organizational stakeholder (OS). During the 2005–2006 term, the company participated in the Advisory Group for the revision process for the G3 Guidelines. In July 2006, one of Matsushita's employees was appointed as a member of the Stakeholder Council (SC).

### Fiscal 2006 achievements and challenges concerning priority themes in the **CSR** constituents

This report details achievements and challenges mainly concerning priority themes by classifying fiscal 2006 initiatives into a set of CSR constituents. Based on future challenges, Matsushita focuses on the implementation of specific CSR efforts in line with these six initiatives. At the beginning of For the Global Future (see pages 46-60), we introduce several of our efforts according to the six initiatives.

CSR constituents (page)	Priority themes	Fiscal 2006 achievements	Future challenges	Six initiatives in CSR activities
Environment*	To achieve a GHG Factor 5 and Resource Factor 3 for One Household through Creating Values for a New Lifestyle (fiscal 2011 target from fiscal 1991).	Achieved a GHG Factor 2.3 and Resource Factor 1.6 through the development of technologies for conserving both of energy and resource in products.	To improve environmental efficiency in products.  To improve global environmental performance in production.	Pursue ecological intelligence
Quality (pages 31-32)	To establish and set in place a mechanism to monitor signs of significant problems and respond promptly (Early Quality Monitoring System).	The system was introduced into all business domain companies in Japan by November 2005.	To implement an early quality monitoring system on a global scale.  To accurately identify numbers of each model of FF-type kerosene heaters subject to recall.	
CS (pages 31-32)	To consolidate customer centers to ensure prompt responses  To reinforce the mechanism of reflecting customers voices in products.	In April 2006, the Integrated Customer Contact Center (ICCC) was launched.	To promote a more rigorous system of incorporating customer feedback into products, centering on ICCC.	Create products of high
Universal design (UD) (pages 33-34)	To improve customer satisfaction and to expand customer bases through successive launches of UD products.	Released leading products with UD features, such as products with voice guides and VIERA links.	To establish new design guidelines for voice assistance and websites.	social value
Information security (page 35)	To realize an organization where information security mechanisms are in place in all business flows.	Global Information Security Management Regulations were established, applying to about 330,000 employees across the Group.	To establish an organization where information security will improve autonomously.  To reinforce information security deserving of manufacturing oriented company, etc.	
Fair business practices (page 36)	To establish a corporate culture that places more emphasis on compliance for thorough implementation of super-honest management.	330,000 employees now comply with the Code of Conduct.      Established fair trade officers at regional headquarters and sales companies.	To enhance capabilities of planning, developing rules, promoting, and monitoring compliance-related issues.  To promote compliance efforts globally, e.g. trade laws.	Ensure commitment to fairness and honesty
Partnerships with suppliers and retailers (pages 37-38)	To stipulate CSR assessment as a basic criterion for selecting suppliers in order to promote CSR-oriented Procurement globally.	A new Basic Purchasing Agreement, including articles on human rights, environment, and information security, was laid down.	To promote re-signing with all business partners and auditing based on the new agreement.	Enhance responsible partnership
Corporate citizenship activities (pages 39-40)	To implement activities, making use of the characteristics of each locality to empowering society, the company, and employees.	External stakeholders feedback was incorporated in deciding on corporate citizenship policies.	To make sure that corporate citizenship policies are shared by all divisions of the group worldwide, and to develop an effective information collection system.	Promote global citizenship activities
Relationships with employees (pages 41-45)	To increase diversity in the workplace based on "participative management," "performance management," and "respect employees."	Established the Corporate Diversity Promotion Division and the e-Work Promotion Office (as of April 1, 2006).	To create an organizational culture where diverse groups of personnel can contribute, regardless of gender, nationality, or age.	Achieve excellent workplaces

<sup>\*</sup> For details, refer to the Environmental Data Book 2006 (scheduled for release in September).

#### Other achievements

- \* Listed in the Dow Jones Sustainability Index
- \* Listed in the FTSE4Good Global 100 Index
- \* Listed in the Ethibel Sustainability Index
- \* First place in the 9th Nikkei Environmental Management Survey
- \* First place in the Nikkei Worker-friendly Company Ranking







## Environmental Responsibility

# Supplying environmentally-conscious products to our customers and improving their quality of life

Global environmental degradation has become a pressing issue,

as indicated by the abnormal weather conditions that are occurring more frequently than ever.

To address this challenge, people around the world are focusing on preventing global warming,

utilizing limited resources more effectively, and reducing the risks involved in the use of chemicals.

The ultimate goal of these efforts is to create truly sustainable societies.

In this context, it is essential that ordinary people contribute to reducing the environmental impacts of their day-to-day activities.

In 2001 Matsushita reaffirmed its business vision, Coexistence with the Global Environment; upholding it,

we are striving to minimize the environmental impact of our products,

while at the same time improving product functions to enhance peoples' quality of life.

As a yardstick to measure the results of these endeavors aimed at Creating Value for a New Lifestyle,

Matsushita has developed Factor X, and is developing environmentally-conscious products and services by referring to this indicator.

Although Factor X was originally designed for individual home appliances,

Matsushita plans to apply Factor X to office equipment, industrial machines, transportation, and other social infrastructures.

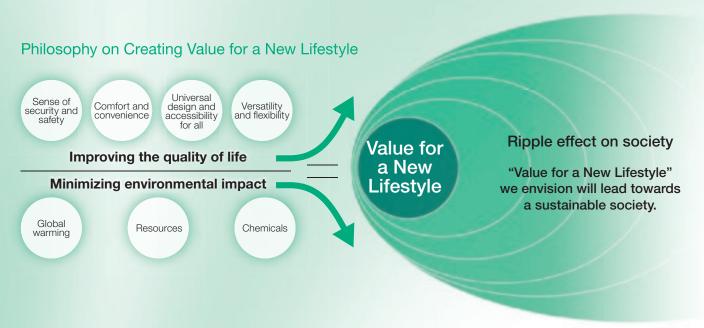
Lights-out Campaign

As part of an effort to help prevent global warming, all of our 220 business sites in Japan turn off their neon and electric signboards at 8:00 p.m. (page 24).



### Aiming to Coexist with the Global Environment through Creating Value for a New Lifestyle





### Targets and results of efforts to Create Value for a New Lifestyle

(Relative to fiscal 1991)

		Targets for f
Factor X for One Household	GHG Factor	5
(Approximately 90 items)	Resource Factor	3

	Targets for fiscal 2011	Results in fiscal 2006	Details		
GHG Factor	5	2.3	Quality of life	Total number of functions:* 1.4 times (90 in fiscal 1991 – 127 in fiscal 2006)	
		2.3	Environmental impact	Annual GHG emissions: 0.60 times (9.1 tons/year in fiscal 1991 – 5.5 tons/year in fiscal 2006)	
Resource		Quality of life	Number of product functions: 1.4 times (90 in fiscal 1991 – 127 in fiscal 2006)		
Factor		1.0	Environmental impact	Non-circulating resources: 0.89 times (470 kg/year in fiscal 1991 – 420 kg/year in fiscal 2006)	

<sup>\*</sup> Calculating each function of targeted products as one

### Improving Factor X for One Household over product life cycles

The concept of Factor X was introduced with the aim of enhancing the quality of peoples' lives by improving our product functions, while at the same time reducing their environmental impact over their life cycles, ranging from the manufacturing of components and parts, to the manufacturing of products, their distribution, use by customers, and recycling. Particular focus is on preventing global warming, seeking effective utilization of resources and minimizing pollution risks involved in the use of chemicals

Matsushita has integrated the factors of approximately 90 appliances and systems used in an average Japanese household to strive for improving the results of Factor X for One Household. As a yardstick for measuring the quality of peoples' lives, in fiscal 2006 Matsushita began using the number of product functions, instead of the number of products.

To reinforce our commitment to improving the quality of life and simultaneously minimizing environmental impact, Matsushita has incorporated its resolution to realize GHG Factor 5 for One Household by fiscal 2011 into our Management Policy for fiscal 2007.

### **Progress of Environmental Sustainability Management**

### Reinforcing efforts in environmental sustainability management, human resource development, and action plan activities



Related information: Basic approach to environmental protection panasonic.net/eco/policy/

To achieve our goal for Factor X for One Household set for fiscal 2011, it is essential to reinforce our initiatives to reduce the environmental impact of every business process.

Accordingly, we must first integrate environmental programs in our Group-wide management strategies, reinforce to develop employees responsible for environmental affairs, and thoroughly promote Plan-Do-Check-Action (PDCA) cycles in Environmental Management System.

### Basic approach to environmental sustainability management

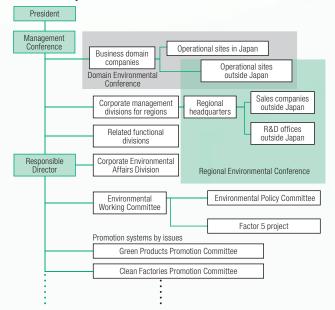
Matsushita's corporate mission is to contribute to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world. Based on our Basic Management Objective, in 1991 Matsushita committed a Basic Environmental Management Policy, and subsequently issued an Environmental Statement. In 2001 we further expanded our Environmental Vision, directing our efforts towards resolving environmental problems in seven areas, together with an action plan to be achieved in 2010, entitled Green Plan 2010.

In line with these policies and plans, Matsushita will further its environmental sustainability management through the thorough implementing PDCA cycles at all our business sites.

### Integrating the environmental decision-making functions into the management conference

From 1997 to 2004 we have held Corporate Environmental Conferences twice a year, with members comprising all directors and executive officers. At the Conference, chaired by the president, the highest-level of decision making power is brought

Figure 1 Environmental sustainability management promotion system in fiscal 2007



to bear on environmental issues. Under the leadership of top management, the conferences have adopted various innovative programs over the past eight years, promoting environmental initiatives across the group. Therefore in April 2005 we dissolved the Corporate Environmental Conference and transferred its functions to our Management Conferences (Figure 1).

### Systematically developing employees responsible for environmental activities

To reinforce our environmental activities, it is necessary to develop staff members who will lead environmental activities continuously and systematically. In April 2006 we reorganized our human resource development system and established the Environmental Human Resource Development Committee which is responsible for promoting the new system. The committee will promote the development of the experts and leaders responsible for fulfilling our environmental commitments, by formulating training programs for individual members based on quantitative analyses of their skills using our in-house skills evaluation system (page 43).

### **Determining priorities** in the new Green Plan 2010

As fiscal 2006 is the middle year of the Green Plan 2010 (concluding in fiscal 2011), we have reviewed the policies and target levels stipulated in the plan. Based on this comprehensive review, we prepared a new Green Plan 2010 in February 2006 (Table 1).

In the new Green Plan 2010, environmental targets set for various areas are ranked in accordance with their priorities. The utmost priority is placed on Creating Value for a New Lifestyle, which represents Matsushita's basic product and business approach. Fundamental to this aim is increasing both the Green Products development rate (Graph 1) and the Clean Factory accreditation rate. The last two were also selected as priority targets since most of our products has a greater environmental impact during the stages of product manufacturing and use.

### Raising the criteria of Green Products

We have developed Green Products (GP), based on our original environmental criteria throughout the products' life cycles. Graph 1 shows GP development rate (ratio of sales of GPs against sales of all products developed in a given year). We set a target rate for each year; and in fiscal 2006 the actual rate reached 94% (877 models), exceeding the target level for that year (70%). This has resulted from increased speed in the development of environmental technology. To supply products with even greater environmental performance, we have also upgraded the criteria for GPs (page 20).

### Setting the Clean Factory (CF) Accreditation System

Since we operate over 300 plants across the world, we must work to reduce the environmental impact of our industrial

activities on a global basis. We call factory organizations which have reduced the environmental impact of their manufacturing processes in a comprehensive manner Clean Factories.

To convert all our factories into CFs, in fiscal 2006 Matsushita starting from Japan sites established its CF Accreditation System (Figure 2), under which the efforts of each factory are quantitatively evaluated. At the same time, we set a basic target that at least 90% of all Matsushita plants should obtain CF Accreditation by fiscal 2011. In our CF Accreditation System, we employ various yardsticks to evaluate each factory operation including energy-conservation rates and reduction rate of waste emission. To obtain CF Accreditation, the respective plants must steadily improve the levels of these rates; to this end, all our plants worldwide must thoroughly implement PDCA. We also evaluate and promote the distinct and original initiatives taken up by individual factories, reflecting the characteristics of the countries and regions where they are located.

Graph 1 **GP Development Rate** 

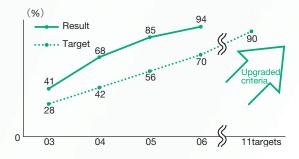


Figure 2 Clean Factory (CF) Accreditation System

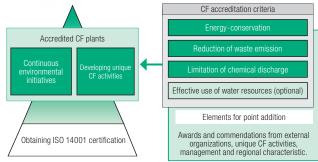


Table 1 New "Green Plan 2010"

Item	Indicator			Targets for fiscal 2011	
			CLIC Factor	0	
Value for a New Lifestyle Factor X		for One Household	GHG Factor	5 (relative to fiscal 1991)	
			Resource Factor	3 (relative to fiscal 1991)	
Green Products	Green Pr	oducts Development Ra	te	90% or more	
Clean Factory	Clean Fa	Clean Factory Accreditation Rate		90% or more	
Area targets (Relative to fis	cal 2001)				
Item		Targets for fiscal 2011			
Product recycling		Establishing recycling systems for all home appliance categories			
Environment/energy business		Promoting widespread of household fuel cells, etc.			
Green marketing and distribution		Promoting a modal shift: increasing rail freight to 30,000 (in Japan), etc.			
■ Management targets (Rela	tive to fiscal 2001	)			
Item		Targets for fiscal 2011			
Environmental communication		Increasing LE*1 families: to at least 80% of all employee households in Japan, etc.			
Environmental sustainability management and human resources		Promoting visualization of environmental sustainability management, etc.			
	ent			s, and heavy metals, etc.	

■ Environmental performance targets (relative to fiscal 2001)

Indicators for achieving basic and area targets			
Item			Targets for fiscal 2011
Preventing global warming	Products		Estimation of CO <sub>2</sub> emissions from product use
	Factories		10% reduction of CO <sub>2</sub> emissions per basic unit* <sup>2</sup>
	Distribution		4% reduction of CO <sub>2</sub> emissions per basic unit (relative to fiscal 2007)
	Offices		1% reduction of CO <sub>2</sub> emissions per basic unit (relative to previous year) (under discussion)
	Fact-	Waste	20% reduction per unit of waste generation*3
	ories Wat	Water	10% reduction per unit of water consumption*4
Limitation of chemical discharge	Factories		10% reduction of chemicals released/transferred (relative to fiscal 2006)

- \*1 LE: "Love the Earth" (page 24)
  \*2 CO<sub>2</sub> emissions / (consolidated sales ÷ Bank of Japan's corporate goods price index (electrical equipment))
  \*3 Waste generation volume / (consolidated sales ÷ Bank of Japan's corporate goods price index (electrical equipment))
  \*4 Water consumption volume / (consolidated sales ÷ Bank of Japan's corporate goods price index (electrical equipment))

### **Material Themes**

### To reduce environmental impact in three major areas

Matsushita values as its main priorities: reducing CO2 emissions, controlling the use of chemicals, and reducing waste by promoting recycling.

### Energy-conserving in products and manufacturing

CO<sub>2</sub> emissions are the most prominent during the stage of product use. In fact, CO<sub>2</sub> emissions from use of our products are approximately 11 times from their production. Therefore Matsushita is committed to developing products at the highest-levels of the industry's environmental efficiency (page 19) and our energy creation business such as household fuel cells(page 23).

We manage  $\mathrm{CO}_2$  emissions from manufacturing stage by setting target levels in terms of a basic unit (page 21) and the basic units are steadily decreasing. The total volume of  $\mathrm{CO}_2$  emissions, however, is actually increasing in Japan, China, and other parts of Asia, due to increased production of digital home appliances. Manufacturing these digital products entails greater energy consumption. For this reason, we place our utmost priority on reducing  $\mathrm{CO}_2$  emissions in business for components and devices business, and in our operations in China and other Asian countries

### Managing the use of chemicals to minimize pollution risks

In response to growing concern about the diffusion of chemicals in the natural environment and their potential impact on local ecosystems, Matsushita is committed to the comprehensive management of chemicals, based on risk assessments of both the chemicals used in our manufacturing activities and those contained in our products. Specific commitments include remediation of soil and underground water contamination in our facility compounds, and the management of high-risk substances, including polychlorinated biphenyl (PCB) and asbestos (page 26).

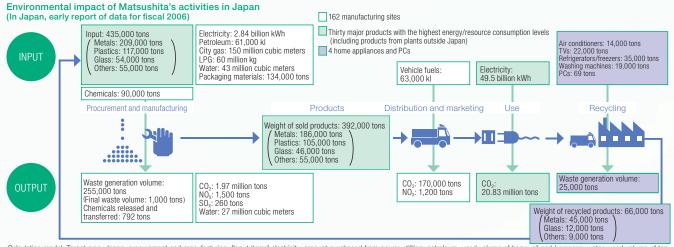
Matsushita provides a wide variety of products to its customers worldwide. Since the majority of our products are discharged by customers after their use, it is imperative that Matsushita curtails use of specified chemical substances in our products, thereby reducing the risk of future pollution. Currently we are concentrating our efforts on ensuring that all Matsushita products supplied worldwide comply with the EU RoHS Directive\* (page 25).

Directive on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment.

### Promoting effective utilization of resources worldwide

To avoid resource depletion and the destruction of ecosystems caused by resource extraction, manufacturers must improve their resource productivity. Reducing waste is also necessary from the perspective of the limited capacity of landfills. Since fiscal 2003 Matsushita has been maintaining at least a 98% recycling rate of the waste generated from manufacturing activities in Japan (page 27). The final waste volume in fiscal 2006 amounted to 1,000 tons.

Matsushita's products annually sold in Japan weigh a total of 392,000 tons. Since 2001 Matsushita has been committed to the recycling of waste electronic products. In fiscal 2006 we achieved a recyclability rate of approximately 70% for the collected waste electronic products. Based on our experience of recycling in Japan, Matsushita also began establishing recycling systems in Europe in fiscal 2006. To ensure the effective and efficient recycling of products that are currently being marketed, Matsushita is also committed to developing products that are easy to dismantle and sort by type of materials (page 28).



Calculation model: Target area: Japan; procurement and manufacturing: [Input items] electricity: amount purchased from power utilities; petroleum: used volume of heavy oil and kerosene; water used volume of tap water, industrial water and underground water; packaging materials: corrugated cardboard, polystyrene foam, paper board, etc.(excepting PanaHome) [Output items] CO;: CO, emissions associated with the use of electricity, city gas, LPG and petroleum; NO, and SO,: emissions from business sites governed by legal regulations; water: discharge to sewage and public water districts; distribution and marketing: transport from manufacturing sites to retail shops (in case of imported items, transport within Japan only); use: CO<sub>2</sub> emissions associated with lifetime power consumption of target products. Lifetime power consumption is calculated based on the number of products sold, usage time, and service life (10 years); recycling: the weight of recycled products equals the weight of components and materials that can be either sold or provided free of charge to businesses that use such components and materials.

### Commentary for Matsushita's Environmental Sustainability Management from Jonathon Porritt

One of the things that The Natural Step really admires about Matsushita is its intense passion about matter - about the raw materials, chemicals, water and energy that provide the inputs into all their production processes. It sounds so easy when you hear people talking about "reducing the environmental impact" of everyday electrical and electronic goods, but it's far from easy. Behind every one of Matsushita's targets and achievements there lies an extraordinary wealth of data and information, a body of skills and experience in environmental accounting and management that makes it possible, year on year, to improve overall environmental performance.

So it is right that a report of this kind explains the company's internal processes and practices as well



Chairman of The Natural Step U.K. Mr. Jonathon Porritt

as its external commitments. On the face of it, it may not seem so important that Matsushita is raising the status of all environmental professionals within the company, to help deliver the new Green Plan 2010, or is embedding a new environmental sustainability management system across the company as a whole. But these things matter enormously in terms of corporate culture, changing employee behaviour, and incentivising further improvements.

#### Meeting new challenges

Any performance report of this kind will contain a combination of achievements and challenges still to be met. The role of The Natural Step is to raise those challenges, to test for real leadership, and to ask some of the really difficult questions.

For instance, it's great that the company is now going to toughen up the criteria which defines what it means by a Green Product, but what is it going to do about absolute increases in CO<sub>2</sub> emissions (through continuing growth of the business), even as relative emissions per unit of product continue to fall? Should it not set both short and long-term targets for absolute reductions, given the growing concern about climate change? And why is so little happening in the company on sourcing more of the energy that it needs from renewables? Without a bigger investment in renewable energy, it will be very difficult if not impossible to achieve absolute reductions in CO<sub>2</sub> emissions. And as an added benefit, would this not be one way of getting on top of ever-rising emissions from increased production in China - where there are still substantial challenges to be met in water and waste management as well?

In our meetings with Matsushita managers, we also challenged them to be bolder in driving forward their innovation process. Though we welcome the inclusion of the challenge to develop more Green Products in their Business Plans, the process seems geared more incremental, step by step improvements rather than two more radical breakthroughs. There is so much more that could be done.

#### The test of transparency

Matsushita's commitment to transparency, to acting in "a super-honest manner", is highly significant, and we have two comments in that regard.

First, it would be good to see more discussion in this report and elsewhere of the huge dilemmas facing a company like Matsushita. At the moment, it all seems a bit too easy, even though our discussions with Matsushita indicate that it is very well aware of the dilemmas now facing them. Secondly, we are worried about the potential for confusion between all the different initiatives going on inside the company, and all the different categories of Green Products, Super Green Products, Superior Green Products, V-Products and so on.

Simplicity is also crucial, as well as transparency, to ensure the best possible engagement with consumers. Customers' use of Matsushita's products is responsible for emitting nearly11 times as much CO2 as is emitted in the manufacture of those products. We would therefore like to see the company build on the undoubted success of its Eco & Ud HOUSE pilot (page 48) to help more people to understand the scale of the challenge we now face in terms of resource efficiency and climate change. It needs to widen its understanding of "quality of life" to ensure that its GHG Factor 5 for One Household commitments are genuinely geared to improving peoples overall wellbeing. Through initiatives of this kind, the company should aspire to do as much for its customers as it has done for its employees through its Love the Earth Citizen's Campaign.

#### Engaging with society

How can the company then reach out beyond its customers, into society more broadly, to facilitate the transition to a low-carbon, resource-efficient way of life? This will entail re-thinking the skill base the company relies on to meet its sustainability challenges. The upgrading of environmental professionals needs to be matched by investment in expertise in behaviour change, communications, sustainable consumption, and so on. In all such matters, Matsushita needs to be even more active over the next few years in making responsible, resource-efficient citizens not just of its staffs and suppliers, but of us all!

Finally, we would like to see Matsushita develop an overarching sustainable development framework, bringing together its commitments to society, its employees, its shareholders and suppliers, as well as on the environment. At the moment, these things all seem to be pursued independently, and we believe a more integrated, more comprehensive approach will both strengthen overall performance and improve communications inside the company and with all its stakeholders.

Chairman of The Natural Step UK Chairman of the UK Sustainable Development Commission Jonathon Porritt





In London (March 2006)

#### Biographical details of Mr. Jonathon Porritt

Jonathon Porritt, Co-Founder of Forum for the Future (FFF) and Chairman of the Natural Step U.K., is an eminent writer, broadcaster and commentator on sustainable development. Established in 1996, FFF is now the UK's leading sustainable development charity. He was appointed by the Prime Minister as Chairman of the UK Sustainable Development Commission in July 2000. This is the Government's principal source of independent advice across the whole sustainable development agenda. In addition, he has been a member of the Board of the South West Regional Development Agency since December 1999, and is Co-Director of The Prince of Wales's Business and Environment Programme.

He was formerly Director of Friends of the Earth (1984-90); co-chair of the Green Party (1980-83) of which he is still a member, Jonathon received a CBE in January 2000 for services to environmental protection.

### **Prevention of Global Warming**

### Making all Matsushita products green to reduce CO<sub>2</sub> emissions from households



Related information: N's Eco Project national.jp/2eco (in Japanese only)

To reduce CO<sub>2</sub> and other GHG emissions from households, Matsushita is striving to improve product energy efficiency and promote such product-use. Recently we have upgraded the criteria for the original accreditation system for Green Products.

### Concentrating on efforts for energy-efficient products

In fiscal 2004, 25.2 billion tons\*1 of greenhouse gases (converted into CO<sub>2</sub>) were released worldwide. The IPCC\*2 has estimated that during the 21st century the average global temperature will rise by 1.4-5.8 °C. If this happens, it will cause a significant impact on the global environment. In Japan, although the industrial sector is most responsible for CO<sub>2</sub> emissions (responsible for approximately 40% of the total national emissions), increasing rates of the business, household, and transportation sectors are relatively higher. Efforts to reduce emissions, therefore, must also be made in these sectors.

Measurement of CO<sub>2</sub> emissions associated with our products over their life cycle indicates that CO2 emissions from product-use stage are the highest. In Japan, 20.83 million tons of CO<sub>2</sub> (converted from power consumption) was generated through the use of household appliances in fiscal 2006 (Figure 1). This amount accounts for 12% of the CO<sub>2</sub> emissions from the Japanese household sector. In contrast, CO2 emitted during the manufacturing and distribution stages of our products accounts for 0.4% and 0.2% of the CO<sub>2</sub> emissions from the industrial sector in Japan, respectively. Thus we place particular priority on improving product energy efficiency. We are now striving to develop and promote products with higher energy efficiency.

- \*1 Source: Handbook of Energy & Economic Statistics in Japan (2006)
- \*2 IPCC: Intergovernmental Panel on Climate Change
- \*3 Calculation based on data supplied by the Ministry of the Environment, Japan (data for fiscal 2005)

### Enhancing the energy efficiency of our mainstream products

In 1991 Matsushita established the Matsushita Product Assessment system, under which the environmental impact of our new products is evaluated during their planning and design stages by conducting a product life cycle assessment (LCA)\*4 for each product. Based on the results of product LCAs, we accredit environmentally-conscious products in the following three categories: Green Products (GP), Superior GPs, and Super GPs (Figure 2). Matsushita annually reviews and upgrades criteria for accrediting GPs. To better promote the continued development of GPs, our GP development plans have been included within the company's business plans since fiscal 2005.

In fiscal 2006, Matsushita developed and marketed 877 GP models. The GP development rate\*5 for the year reached 94%, significantly surpassing the target level (70%) (page 16). The

Figure 2 **Green Products System** 



Mandatory: non-use of 6 specified chemical substances

- product lifespan x product functions \*1 GHG efficiency= GHG emissions over the entire life cycle
- product lifespan x product functions \*2 Resource efficiency = non-circulating resources over the entire life cycle

Figure 1: Matsushita's CO<sub>2</sub> emissions in Japan (fiscal 2006)

#### 20.83 million tons\*1 1.97 million tons 0.17 million tons from manufacturing from distribution from use 0.4%\*2 of CO2 0.2%\*2 of Japan's 12%\*2 of Japan's emissions from Japan's freight transportation household sector industrial sector (distribution) sector

<sup>\*1</sup> An in-house calculation, estimated from the annual number of sold units of 30 major products with the highest energy/resource consumption levels, the usage time (based on industry standards or Matsushita's independent standards), and product service life (10 years). The 30 products mean plasma TVs, LCD TVs, CRT TVs, DVD recorders, SD stereo systems, fax machines, refrigerators, air conditioners, microwave ovens, IH cooking heaters, washing machines and dryers, fully-automatic washing machines, laundry dryers, rice cookers, dish washer & dryers, natural coolant (CO<sub>2</sub>) heat pump water heaters, electric thermos pots, electric carpets, vacuum cleaners, heated toilet seats with warm water sprays, electric irons, dehumidifiers, humidifiers, ventilators, air purifiers, bathroom ventilators & dryers, range hoods, fluorescent lamps, home-use lighting equipment and hair dryers.

<sup>\*2</sup> Calculated from the data of the Ministry of the Environment, Japan (fiscal 2005 data, fiscal 2004 data for distribution)



Digital high-definition plasma TV (TH-37PX600) features 37% lower annual power consumption than a conventional model (TH-37PX300), resulting from improved luminous efficiency. Tilted-drum washer/dryer (NA-VR1000) was accredited as Super GP. It incorporates the world's first heat pump drying system, features 50% lower power and water consumption than a conventional model (NA-V81, in case of washing and drying 6 kg of laundry).



number of Superior GPs nearly doubled, from 19 in fiscal 2005 to 37 in fiscal 2006. Tilted-drum washer/dryer (NA-VR1000) was accredited as Super GP. In this environment, by continuing efforts in research and development, Matsushita will continue to aim at creating Super GPs.

- \*4 Method to quantitatively assess the environmental impact of products at each product life stage.
- \*5 Ratio of sales of GPs against sales of all products developed in a given

### Enhancing accreditation criteria to improve the energy efficiency of all our products

To further enhance Matsushita's energy conservation technologies, we have upgraded the accreditation criteria for GHG efficiency in our new Green Plan 2010. The target level set for fiscal 2011, for instance, has been upgraded from 1.5 times to 2.0 times that of the level in fiscal 2001. By achieving a target GP development rate while satisfying such high criteria, we intend to improve the environmental performance of all our products, thereby enhancing their competitiveness.

At the same time, we are committed to developing what we call V-Products, a series of products that create extra value for society and for people's daily lives, while playing the role of leading Matsushita's business growth. Criteria for V-Products accreditation include high levels of [1] black-box technologies, [2] universal designs, and [3] eco-friendly innovations. We aim to integrate the environmentally-sound technologies used in V-Products and Superior GPs, so as to further enhance the value to our customers.

### Promoting environmentally-conscious products through N's Eco Project

Since 2003 we have been committed to N's Eco Project, a campaign designed to promote both greening and green products.

In this plan, Matsushita publicized the importance of using environmentally-conscious products by supplying data indicating how much users of such models can conserve on their electric and water bills compared with users of conventional models. We publicized such data through various media, on our websites, and in retail stores. To promote greening, Matsushita offered flower seeds to 3,741 kindergartens nationwide, and planted 4,814 cherry seedlings all over Japan.

In 2005 we promoted public awareness of the importance of environmental preservation. As a campaign mascot, we used "Green Santa Claus" (Danish ambassador of goodwill and environmental protection). To involve the public in the campaign, we asked the public to draw pictures of natural objects. Matsushita promised to plant one seedlings matching for each picture drawn and submitted.

Moreover, we are publicizing product environmental information and introducing energy-efficient use of products through such means as catalogues and brochures.

Figure 3 New criteria for Green Products (fiscal 2011) GHG efficiency

	,				
Conventional	1.5 times (relative to the level of fiscal 2001)				
	2.0 times (relative to the level of fiscal 2001)				
New	or				
	The industry's top level in terms of energy efficiency *1				
Resource efficiency					
Conventional	1.7 times (relative to the level of fiscal 2001) & the industry's top level				
	1.7 times (relative to the level of fiscal 2001)				
	or				
New	Within 10% of the industry's top level				
	or				
	Recycling rate higher than the level of previous year *2				

<sup>\*1</sup> Within the top 10% (or equivalent) in the energy efficient products list, issued by the Energy Conservation Center, Japan



Green Santa Claus

<sup>\*2</sup> Legally defined recycling rate + 25% for the following four appliances specified by the relevant Japanese laws: refrigerators/freezers, air conditioners, TVs, and washing machines

### **Prevention of Global Warming**

# Managing CO<sub>2</sub> emissions from manufacturing by concentrating on our components and device businesses and operations in China



Related information: Improving energy efficiency at factories panasonic.co.jp/eco/cf/senergy.html (in Japanese only)

To achieve the global target of reducing  $\rm CO_2$  emissions, all group companies are committed to carrying out our Three-year Energy Conservation Plan.

Particular focus is on controlling CO<sub>2</sub> emissions in the business and geographical areas where increased emissions are attributable to the growth of our business activities.

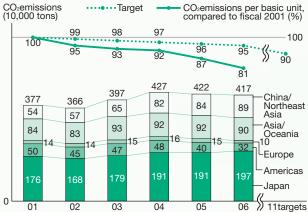
### Achieving target for CO<sub>2</sub> emissions per basic unit

Matsushita has set the following targets for fiscal 2011: to reduce CO<sub>2</sub> emissions per basic unit\*1 by 10% from the level of fiscal 2001 on a global basis; and to reduce CO<sub>2</sub> emissions per unit of actual production\*2 by 25% from the level of fiscal 1991 in Japan.

To promote energy conservation on a global basis, each manufacturing site worldwide formulates a Three-year Energy Conservation Plan, which integrates energy conservation initiatives and investment programs, reviewing and updating them annually. Specific targets for the respective factories are indicated by our so-called Energy Conservation Rates.\* Assembly factories are expected to annually achieve the Rate of at least 3.5%, while component and device factories, which manufacture electronic components, are expected to achieve a rate of at least 7%. In fiscal 2006 Matsushita's assembly factories and component and device factories achieved an average of 3.5% and 6.2%, respectively. This means that we reduced CO<sub>2</sub> emissions by 220,000 tons on a global basis. Therefore, in fiscal 2006, global CO<sub>2</sub> emissions per basic unit have been cut by 19% from the level of fiscal 2001 and we achieved the target for fiscal 2006 (Graph 1).

- \*1 Basic unit = CO<sub>2</sub> emissions /(consolidated sales / Bank of Japan's corporate goods price index [electrical equipment])
- \*2 Actual production = nominal production / Bank of Japan's corporate goods price index [electrical equipment])
- \*3 Energy conservation rate = amount of energy consumption reduced in the current fiscal year's measures (converted to CO<sub>2</sub>) /amount of energy consumed in the previous fiscal year (converted to CO<sub>2</sub>)

Graph 1 CO<sub>2</sub> emissions per basic unit (Global, manufacturing stage)



Note: Basis for calculating Matsushita's CO<sub>2</sub> emissions

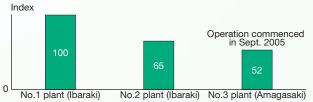
- The GHG protocol's CO<sub>2</sub> emissions factors for each country were used for electricity purchased outside Japan.
- \* The factor related to fuels was based on the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (Draft 1.6) by the Ministry of the Environment, Japan.

### Measures for the increase in actual CO<sub>2</sub> emissions

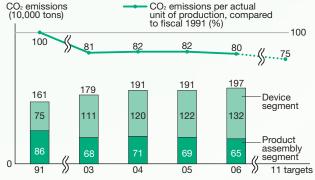
Even though achieving the target of basic unit, the absolute  $\mathrm{CO}_2$  emissions increased by 400,000 tons compared to fiscal 2001. This is attributable to expanded production volume in China and other parts of Asia. The  $\mathrm{CO}_2$  emission factor (factors for calculating  $\mathrm{CO}_2$  emissions based on energy consumption) for China is higher than those for other countries, due to high dependency on coal. Moreover in Japan, demands for digital home appliances are rapidly growing, which entails semiconductors and plasma display panels (PDP). Production of such devices involves significant power consumption, resulting in greater  $\mathrm{CO}_2$  emissions. Therefore we will take every possible measure to curtail its  $\mathrm{CO}_2$  emissions associated with our devices businesses, and on our operations in China and other Asian countries.

At a new PDP plant in Amagasaki in Japan,  $CO_2$  emissions per unit PDP are approximately 48% lower than those of our first Ibaraki Plant. This radical reduction has been enabled by increasing the number of panels cut from a single sheet of glass, as well as by minimizing the space for heat treatment.

Graph 2 CO<sub>2</sub> emissions per unit of PDP production



Graph 3 CO<sub>2</sub> emissions per unit of actual production (Japan, manufacturing stage)



Note

The factors used for purchased electricity were the averages for all power sources at the receiving end, as reported by the Federation of Electrical Power Companies of Japan. The  $\rm CO_2$  emissions factors for individual fiscal years were: 0.410 kg  $\rm CO_2$ /kWh (fiscal 1991), 0.407 kg  $\rm CO_2$ /kWh (fiscal 2003), 0.436 kg  $\rm CO_2$ /kWh (fiscal 2004), 0.421 kg  $\rm CO_2$ /kWh (fiscal 2005), and the value for fiscal 2005 was used for estimating  $\rm CO_2$  for fiscal 2006.



Amagasaki Plant, a cutting-edge PDP plant in Japan, has adopted a next-generation technology that enables cutting multiple panels (six panels) from a single sheet of glass so as to optimize production yields of display panels In addition, the exterior walls of the building are covered with a photocatalytic coating, which has the capacity to remove the NO<sub>x</sub> equivalent of 1,800 poplar trees. The plant is also equipped with a rainwater recycling system and Matsushita's original wind/solar hybrid power "Kaze-Kamome" (page 23).

### Conserving energy through innovation of manufacturing technologies

In the production of semiconductors, tests are conducted to detect early failures by applying high voltage under high temperature. In the past, tests were conducted at the final stage of assembling the semiconductor packages. Detecting such failures at an earlier stage, however, would enable a plant to consume less energy by immediately discontinuing the processing the defective products. Accordingly, our Uozu Plant developed and introduced new technology that enables the early testing. Since this new technology uses the heat generated by semiconductors themselves for testing, it can reduce the energy needed for testing to one-sixth. As a result, annual CO<sub>2</sub> emissions decreased by 1,700 tons in fiscal 2006.

#### Initiatives in China and other Asian countries

To promote energy conservation in these countries where our production activities are rapidly expanding, it is imperative to develop local experts in energy conservation technologies. Since February 2005 Matsushita has held seminars on energy conservation technologies in Malaysia, Thailand, Indonesia, the Philippines, and China, so as to help develop the specialists. In the seminars trainees review the results of energy consumption diagnoses and discuss measures to improve energy efficiency. In fiscal 2006 we held three seminars in China. A total of 132 engineers participated in the seminars.

To conserve energy at our plants, steady and persistent efforts are also necessary. For example, many of our plants use compressed air to move products around inside the facilities. It is estimated, however, that approximately 2% of the energy consumed in a plant is lost due to air leakages. During fiscal 2007 we are promoting campaigns to eliminate air leakage from all our plants, thereby helping to curtail overall power consumption.



Exchanging a tube with air leakage

### Modal shift and the use of environmentally-conscious vehicles in distributional operations

We are also committed to reducing CO<sub>2</sub> emissions in the distribution sector under the Matsushita Group Green Logistics Policy, formulated in March 2006. Specific measures include shifting transport modes to more environmentally-conscio us means (modal shift), introducing eco-conscious trucks, strengthening partnerships with green logistics companies, and introducing biofuels (page 23).

In order to shift the primary modes of transport from truck to rail and ships, we have increased the number of rail freight containers (calculated on the basis of five-ton containers) from 1,735 in fiscal 1999 to 17,595 in fiscal 2006. According to our estimation, this initiative reduced fiscal 2006 transportation CO<sub>2</sub> emissions by 8,777 tons. In recognition of these efforts, Matsushita Battery Industrial Co., Ltd., Panasonic Storage Battery Co., Ltd. and Matsushita Plasma Display Co., Ltd. have been awarded the Eco-Rail Mark certification which is given to enterprises that use rail freight for at least 15% of their land transportation of over 500 km distance.

Matsushita Logistics Co., Ltd. was the first in the world to introduce small hybrid trucks for delivery. The shift from conventional trucks to hybrid vehicles was initiated in 2003. By the end of fiscal 2006, the company had replaced 115 trucks with hybrid vehicles, and plans to complete replacement of its entire fleet (306 small trucks) with hybrid, natural gas and other environmentally-conscious vehicles by the end of fiscal 2007. In the Panasonic Leap Ahead Eco Car™ Plan, formulated in January 2005, Matsushita plans to expand the scope of this initiative to introduce hybrid vehicles to Group's sales and service companies, as well as distributing companies. We are planning to replace all our 14,000 business vehicles with environmentallyconscious vehicles by the end of fiscal 2011. Through this vehicle switchover, by fiscal 2011 we will reduce the CO<sub>2</sub> emission from our own vehicles by 8,500 tons, which account for 16% of those in fiscal 2004.

\*4 Eco car: the same type of environmentally-conscious vehicles adopted by the Japanese government and that are designated by the government as low-emission vehicles or vehicles that comply with the green tax plan

### Environmental Responsibility

### **Prevention of Global Warming**

### Promoting the development and effective utilization of new energy sources



Related information: Household Fuel Cell Cogeneration System panasonic.co.jp/appliance/global/FC/

panasonic.co.jp/ideas/closeup/08fuel/

Related information: Kaze-Kamome

panasonic.co.jp/mesc/products/en/product/ windseagul

Worldwide attention is now focused on unused and renewable energy sources, which generate less CO2 and enable effective utilization of our natural resources. To create a sustainable society, Matsushita is promoting utilization of these new energy sources.

### Aiming at household fuel cells' widespread usage by fiscal 2009 and onward



Household Fuel Cell Cogeneration System

Fuel cells synthesize water from hydrogen and oxygen and use the electricity generated in this process as a household energy source. In cogeneration systems, the heat, generated simultaneously with electricity, is also used. Since the fuel cell cogeneration system offers high energy efficiency, the system can reduce CO<sub>2</sub> emissions by 45%, and primary energy consumption by 32% from the average level of conventional energy sources for households (based on research by Matsushita).

In February 2005 Matsushita delivered the world's first commercial type of Household Fuel Cell Cogeneration System to the new official residence of Japan's prime minister. Since then, we have continued supplying the systems; as of the end of March 2006, approximately 100 Matsushita supplied were in operation. Moreover, we have begun marketing houses equipped with the systems. If all Japanese households were to employ such the systems, the GHG reduction effect would be equivalent to the forestation of a land area 30 times that of the Tokyo Metropolis.\*1 We intend to promote the full fledged diffusion of the systems in fiscal 2009 and onward.

In fiscal 2006 the system received Good Design Award for Ecology Design in recognition of its superb design.

\*1 Based on annual CO<sub>2</sub> emissions from a household (estimated by Matsushita) and the National Census of fiscal 2006 (by the Ministry of Internal Affairs and Communications, Japan).

### Using Green Power in Shanghai

The Green Electricity Scheme has been designed to sell electricity generated by solar, wind, geo-thermal heat and other natural energy sources at prices higher than standard electricity, and to allocate the balance in prices for the development of further natural energy sources. In China, Shanghai City has introduced this scheme to promote the use of natural energy. In June 2005 Panasonic Plasma Display (Shanghai) Co., Ltd. signed an agreement to purchase 600,000 kWh of such Green Power for that year.

### Recycling vegetable cooking oil for fueling trucks

From September 2005 to March 2006 we experimentally recycled vegetable cooking oil that had been used at a factory canteen in Kusatsu (Shiga Prefecture, Japan) as a biodiesel<sup>2</sup> to fuel trucks of Matsushita Logistics Co., Ltd. Because vegetables extract CO<sub>2</sub> from the atmosphere as they grew, CO<sub>2</sub> emitted from the biodiesel does not result in a net increase of CO2 in the Earth's atmosphere. The canteen generates 7,000 liters of used cooking oil annually. If we refined all the oil discharged from the canteen, we could save the light oil equivalent of the annual consumption of two trucks. This initiative has also the merit of realizing resource recycling locally. We plan to carry out this model project on a permanent basis, as well as replicating it in other areas.

\*2 Fuels derived from biomass—recently living organisms or their metabolic byproducts.

### Wind and solar power generation system

The "Kaze-Kamome (Wind Seagull)," which Matsushita released in 2001, is a standalone hybrid outdoor lighting system. Electricity generated from wind and solar power runs the lights at night.

The system maintains a steady brightness as long as the wind velocity remains at a minimum of 2.5 meters per second regardless of wind direction. Many governmental agencies have purchased the Kaze-Kamome system since it can supply power in the event of an emergency, in addition to providing light. Moreover, it can be used for crime prevention in parks and other public spaces, when equipped with network cameras.

As of the end of March 2006, 624 units of the Kaze-Kamome system were in operation worldwide. In addition to being wind-powered, the systems help prevent crime.

### **Prevention of Global Warming**

### Eco lifestyles make a great difference



Related information: Love the Earth Citizens' Campaign
panasonic.co.jp/eco/le/ (in Japanese only)
Matsushita Green Volunteer Club
meu.or.jp/ippa/frame/frame\_mgr.html (in Japanese only)

Matsushita promotes eco lifestyles for its employees and their families. Down-to-earth activities to develop environmental consciousness among employees have gained participation of local communities

### Progress of the Love the Earth Citizens' Campaign over the past nine years

In 1998 Matsushita embarked on its Love the Earth Citizens' Campaign for its employees and their families. The Campaign was initiated by the then-president of the company, who believed that to produce Green Products, all employees should have Green Minds. To fulfill Matsushita's vision of Coexistence with the Global Environment, we believe that we must strive to preserve the environment not only at our workplaces, but also at our homes and communities.

The Campaign comprises: [1] keeping Household Eco-account Books, [2] using our own shopping bags instead of free plastic bags provided at supermarkets, and [3] participating in environmental volunteer activities. Users of our original Household Eco-account Books can easily calculate the CO<sub>2</sub> emissions they generate at home, based on their gas and electric power consumption levels. The Books also introduce various ideas to lead eco lifestyles. The number of households that used the Books has increased to approximately 37,000 in fiscal 2006 from approximately 3,300 in fiscal 1999 when the Campaign commenced. Matsushita received the Environmental Minister's Award for Prevention of Global Warming Activities, in recognition of our long-standing efforts. The Campaign, which was begun by Matsushita's employees and their families, is growing steadily, with increasing numbers of people with Green Minds joining the campaign from nearby communities.

In addition to the LE Campaign, we implement the greening campaigns, so called Forest of Co-existence, and Matsushita Green Volunteer (MGV) Club established in 1993, through collaboration with local community members.



Household Eco-account Book

### Participation in "Team -6%" program - Nationwide Lights-out campaign -



Neon lights are switched off.

As an initiative to meet the requirements of the Kyoto Protocol, which took effect in 2005, the Japanese government launched a national program titled "Team -6%," designed to help the country achieve its greenhouse gases reduction target of 6% below 1990 levels by 2012. As a team member of this program, we promoted "COOL BIZ" and

"WARM BIZ" campaigns (a no-tie and no-jacket fashion for business wear during summer to save on air conditioning and casual warm clothing during winter). Moreover we voluntarily continued our Lights-out Campaign to help prevent global warming. As of July 2005 to the end of March 2006, all of our 220 business sites in Japan turned off their neon and electric signboards at 8:00 p.m. for a total of 254 days. This was effective in reducing approximately 384 tons of  $\rm CO_2$  emissions, and approximately 10.55 million yen (US\$92,067) in electricity costs. We are continuing the Light-out Campaign in fiscal 2007.

## 13,450 trees

Over the three years up to March 2006, Matsushita planted a total of 13,450 seedlings at 13 sites so called Forest of Co-existence in various parts of Japan.



### Minimization of Pollution Risks

## Comprehensive management of chemicals to prevent their diffusion into the natural environment



Also in Matsushita's Sustainability Data File:
Chemical substance reduction in products/ Chemical substance management/ Factory environment preservation/ Measures against environmental risks

Related information: The Matsushita Electric Group Chemical Substances Management Rank Guidelines panasonic.net/eco/suppliers/ Environment-conscious materials panasonic.co.jp/eco/gp/catalog/gp01.html (in Japanese only)

With the issuance of the EU's RoHS Directive\*1, we began reinforcing efforts to avoid the use of specified chemical substances in our products and achieved the target level set forth by the Directive at the end of October 2005. Further, we are committed to reducing the volume of chemical substances released/transferred during the production stage. We also place pollution of soil and groundwater at our facility locations under management supervision and take appropriate countermeasures concerned about polychlorinated biphenyl (PCB) and asbestos.

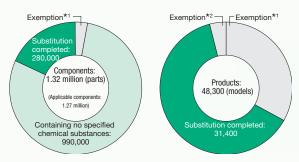
## Initiatives on the non-use of specified chemicals in all our products on a global basis

In July 2006 the RoHS Directive\*¹ will take effects in the EU. The Directive bans marketing of electrical and electronic equipment containing any of the specified chemical substances (lead, mercury, cadmium, hexavalent chromium, and two specified brominated flame retardants). Similar regulations are being imposed in an increasing number of countries.

In June 2003 Matsushita revised its Green Plan 2010 and launched a group-wide program to abandon usage of specified chemical substances in our products destined not only for the EU market but also for the rest of the world's market, established April 2005 as our target deadline. We voluntarily analyzed the chemical composition of all 1.32 million components incorporated in Matsushita's products. Out of the 1.27 million applicable components, approximately 280,000 components contained the specified chemical substances. Matsushita completed substitution of the specified chemicals contained in 240,000 components with alternative substances by the target date (end of March 2005). For the remaining 40,000 components we need a longer time horizon for conducting component quality evaluations and acquisition of safety standards. However, by the end of October 2005 we completed the switchover for all specified chemical substances that had been used in all applicable products (approximately 31,400 products) (Graph 1).

\*1 Directive on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment

Graph 1 Efforts for non-use of specified chemical substances in products(as of the end of October 2005)



<sup>\*1</sup> Components and materials with no feasible alternatives or suppliers, for example those commonly used in other industries, or those with components and materials specified by customers.

### Reinforcing the green procurement system

In implementing the initiative, it is essential to strengthen our green procurement system. We purchase parts and materials from approximately 9,500 suppliers from all over the world. To seek their cooperation, we held meetings around the world, explained our green procurement policies, and asked suppliers to survey the chemical compositions of their products and provide Non-Use Warranty Certificates for the Specified Chemical Substances and Content Survey Sheets for Managed Substances.

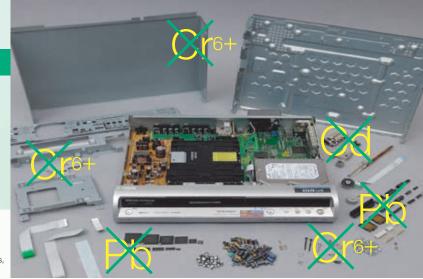
To consolidate data management regarding the Sheets provided by suppliers, we have developed an original database—the GP-Web system. In fiscal 2005 the majority of our suppliers in the world began using this system. As a result, we can now monitor and confirm whether or not the components we purchase in the global market contain specified chemical substances. To assist suppliers in reinforcing their environmental management systems, we have dispatched auditors and monitored our suppliers' environmental quality assurance systems.

### Never to supply products containing specified chemical substances

Since the switchover initiative has been completed, we are currently committed to steady and thorough implementation of the following three principles: not to contain, not to use, and not to discharge specified chemical substances at any of our manufacturing sites. To confirm that our purchasing components contain no specified chemical substances, we have developed an original and simple technique to detect hexavalent chromium and a high-speed, high-accuracy harmful substance analyzing system. Moreover, we have recently installed 360 new analyzers.

We have also developed and introduced systems to prevent contamination with specified chemical substances throughout our production processes, ranging from product design to shipping inspections at all our business sites. To thoroughly establish such systems in our operations worldwide, we have organized our own Techno-school, offering a total of 57 courses in 19 countries to share relevant information and provide practical training. To date, the number of participants in the courses has reached approximately 4,000.

<sup>\*2</sup> Models for which Matsushita has applied for exemption from the RoHS Directive.



To produce our DVD recorder (DMR-EX350) without using specified chemical substances. Matsushita had to develop many components using alternative materials, establish related technologies, conduct reliability tests. and retrain engineers.

## 1,270,000 parts 9.500 suppliers

### Reduction of release and transfer of chemical substances from factories

In the Matsushita Electric Group Chemical Substances Management Rank Guidelines (for Factories), chemical substances are classified into three categories: Prohibition, Reduction, and Adequate Management, Since 1998 we had implemented the "33/50 Reduction Plan" for reducing both the use of Reduction substances and the release/transfer of Adequate Management substances by 33% in three years, and by 50% in six years in each region.

As 33/50 Reduction Plan achieved its goal in Japan, we set a new global goal aimed for fiscal 2011: To reduce the release/transfer of 368 chemical substances by 10% compared to fiscal 2006. While the previous reduction activity targeted 3,486 chemical substances, we will concentrate our efforts on the 368 substances\*2 accounting for at least 80% of the volume released and transferred from our factories. In fiscal 2007 we will prepare reduction schedules up to fiscal 2011 for manufacturing sites that use the designated substances.

\*2 Each ten groups of substances recorded the highest levels of release /transfer in the Pollutant Release and Transfer Register survey (Japan), conducted in 2002 and in our chemical substance survey, five groups of substances specified by the Law Concerning the Promotion of the Measures to Cope with Global Warming, and twenty VOCs recorded the highest levels of release in the survey by the electrical and electronic industry

#### Three approaches to control asbestos

We have established a company-wide countermeasures committee, which surveys risks connected with asbestos and takes appropriate measures across the Matsushita group under the following three approaches: occupational safety and health; facilities (buildings, plants); and products\*3. All our products currently on the market are free from asbestos (page 44).

\*3 For details please refer to the following web pages (in Japanese only): Matsushita Electric Industrial Co., Ltd.: panasonic.co.jp/eco/users/info1.html Matsushita Electric Works, Ltd.: www.mew.co.jp/corp/oshirase/050721/index.html PanaHome: panahome.jp/

### Management of soil and groundwater

During the latter half of the 1980s, soil and groundwater contaminated by a chlorinated organic solvent was detected in some of our sites. Since then we have been committed to the survey and remediation of polluted sites, as well as preventing any recurrence, in compliance with our Manual for Preventing Pollution of Soil and Groundwater and the Guidelines for Preventive Management of Environmental Pollution, both prepared in response to the pollution incident.

In fiscal 2004 we have placed all 143 manufacturing sites in Japan under management supervision<sup>\*4</sup>. Regarding manufacturing sites outside Japan, in fiscal 2006 we placed all 152 manufacturing sites under management supervision. We conducted soil sampling at 57 sites outside Japan, nine of which were detected to have soil pollution exceeding the allowed level. Matsushita will remediate each of these sites.

\*4 Completing surveys, starting remediation, installing inspection wells, preventing outflow, and thorough operational management.

### First success in Japan by the private sector Remediation test of soil contaminated by PCB -

In January 2003 Matsushita voluntarily disclosed that it had buried capacitors containing polychlorinated biphenyl (PCB) in four plants and one former plant site. We have implemented emergency safety measures, excavation of the buried materials, and measurement of adequate management, excluding those still buried at the Panasonic Electronic Devices Matsue compound, where excavation is planned to be completed by 2008.

When we self-disclosed these facts, we promised to remediate the polluted soil. We successfully completed demonstration soil remediation tests, which took place over a period of about five months from May 2005. With cooperation of Nippon Steel Corporation, Mitsubishi Heavy Industries, Ltd. and Nippon Steel Transportation, Co., Ltd., we transported the polluted soil from our plants to Kitakyushu Eco-Town, where it was cleaned using a solvent extraction method. The demonstration test was the first such test in Japan conducted by the private sector. Based on the test results, we plan to initiate full-fledged soil remediation.

### **Effective Utilization of Resources**

### Global development of recycling management



Also in Matsushita's Sustainability Data File:
Recycling of waste electronic products/ Products resource
conserving/ Waste reduction

Related information: product recycling

panasonic.net/eco/recycle/ Ecology Net Europe GmbH www.ecologynet-europe.com

Product recycling promotes not only efficient utilization of limited resources, but also innovations.

Taking advantage of our wealth of experience in recycling,

Matsushita has begun establishing and developing recycling management systems on a global basis.

### Promoting recycling to fulfill the responsibilities of a manufacturer

Today, the volume capacity of landfills everywhere is being strained and there is concern that our living environment will be ruined if society as a whole does not reduce the amount of waste. There are also concern of depleting natural resources and endangering ecosystems as a result of resource exploitation. With this view, it is needed to seek greater utilization of precious resources. Matsushita actively reduces the waste volume from manufacturing sites, and promotes the recycling of waste electronic products as part of our responsibilities as a manufacturer.

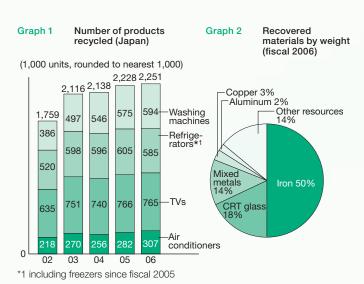
Concerning waste reduction from our production stage, since fiscal 2003 we have consistently achieved what we call "zero emissions"\*1 in Japan. Our waste recycling rate on a global basis was 85.5% in fiscal 2001, which increased to 93% in fiscal 2006.

## Creating an efficient recycling society through effective use of existing infrastructures

In 2001, the Japanese government enacted the Law for Recycling of Specified Home Appliances. The law targets refrigerators (including freezers), washing machines, air conditioners, and TVs, since these products which account for approximately 80% by weight of waste electronic equipment in Japan.

In Japan, to encourage free market competition, waste collection and recycling are conducted by two groups of manufacturers. We have built an efficient geographically dispersed network through the efficient use of existing recycling facilities nationwide. Ecology Net Co., Ltd., jointly established by Matsushita and other leading company, totally manages and operates the recycling scheme, including 190 designated collection sites and 35 recycling facilities, on behalf of manufacturers which concluded contracts.

In 2001 we further established Matsushita Eco Technology Center Co., Ltd. (METEC), our own recycling facility under the concept "from products to products." In fiscal 2006 METEC recycled 700,000 units. In addition to recycling waste electronic products, development of recycling technologies and products that are easy to recycle is implemented at METEC. The dismantling technologies developed by METEC are shared with other recycling facilities within the group, thus contributing to enhancing recycling efficiency across the entire group. Moreover, the facility is open to the public giving educational opportunities to society and publicizing its initiatives to the world. Over the five years since its foundation, a total of 48,000 people have visited METEC from around the world.



Disposers (consumers)

Municipalities

Retailers

Matsushita

Company A

Importers

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<sup>\*1</sup> At least 99% of waste recycling rate (mass of recycled resource ÷ [mass of recycled resource + mass of final disposal]) since fiscal 2006 and at least 98% up to fiscal 2005.



In response to the Directive on Waste Electrical and Electronic Equipment (WEEE), Ecology Net Europe GmbH collects various kinds of waste electronic products, and analyzes them to determine optimal recycling

### Launching a new business based on in-house recycling efforts

Iron, copper, and other metals recovered from waste electronic products are transferred to material manufacturers and refined for their reuse as raw materials. On the other hand, we recycle plastic in-house and reuse as materials for our own products. This has become possible with the cooperation of the recycling facilities, as we have promoted collecting high-quality plastics.

In 2003 we established Environmental Technology Solutions Co., Ltd., which applies our recycling know-how to recycled plastics business. In fiscal 2006, the company marketed approximately 10,000 tons of recycled plastics, including an amount sold to other companies. Moreover, the company operates ET manifest systems that enables companies which discard industrial waste to monitor transportation of waste properly done using GPS\*2, and also confirm the state of waste through digital images via the Internet.

\*2 GPS: Global Positioning System

### Promoting product recycling systems according to the law

To build an effective recycling system for home appliances, it is imperative to ensure that they are definitely collected, which entails cooperation from both consumers and retailers. Since 2001 Matsushita had meetings with retailers and distributors to raise awareness of the importance of recycling systems and the obedience to the law. During fiscal 2006 we strengthened these efforts, holding seminars for approximately 11,000 retailers. In these seminars, we used our original educational tools to promote everyone's understanding of the vital importance of legal compliance. We plan to introduce our own recycling expertise worldwide, exerting leadership in the promotion of recycling.



### Sharing our original expertise in Europe

In Europe, the EU's Directive on Waste Electrical and Electronic Equipment (WEEE) came into effect in August 2005. It stipulates that manufacturers are responsible for collecting and recycling over 90 types of electrical and electronic equipment.

According to the WEEE Directive, manufacturers or the industry as a whole are primarily responsible for building recycling systems. In Germany, to promote free market competition, an industry collective system is not allowed, and individual manufacturers must build such systems. Accordingly, Matsushita established Ecology Net Europe GmbH (ENE) in April, 2005, with the view that our expertise accumulated in Japan would be useful in Germany as well.

To confirm technological levels of local recyclers, ENE has repeatedly visited, together with engineers from Japan, to major recyclers in Germany and other European countries. Given the commencement of collection and recycling of waste electronic products in Germany on March 24, 2006, we intend to strengthen our partnerships with local recyclers to further improve recycling technologies and systems.

### Dismantling 100 models to evaluate the ease of recycling

To achieve a high recycling rate\*3 effectively, it is essential that products are designed with sufficient consideration given to recycling. In April 2005 we launched the group-wide "3R Eco Project"\*4, where product designers conduct dismantling tests to identify recycling-related problems concerned with product design. We believe that developing designs that ensure ease of recycling is also effective in augmenting our manufacturing capability.

We have tested approximately 100 product models, and we prepared a database of recycling know-how for each model.

- \*3 According to the Law of Recycling of Specified Home Appliances, the recycling rate is defined as follows: weight of components and materials that can be sold or transferred free of charge - product weight (in Japan)
- \*4 3Rs: Reduce generation of waste, Reuse materials, and Recycle materials into new products

### Independent Review Report



#### Independent Review Report on "The Panasonic Report for Sustainability 2006"

To the President of Matsushita Electric Industrial Co., Ltd.

#### 1. Purpose and Scope of Our Review

We have reviewed "The Panasonic Report for Sustainability 2006" (the "Report") of Matsushita Electric Industrial Co., Ltd. (the "Company") for the year ended March 31, 2006. Our engagement was designed to report to the Company, based on the results of our review, the credibility of the indicators of CO2 emissions from the Company's manufacturing stages, including CO2 emission by region of the world and CO2 emission reduction (the "Indicators"), for the period from April 1, 2005 to March 31, 2006 included in the Report.

The report of the Indicators is the responsibility of the Company's management. Our responsibility is to independently report the results of our procedures performed on the Indicators.

#### 2. The Standards and the Criteria Used in Our Review

We conducted our review referring to "International Standard on Assurance Engagements 3000 (Revised)" (ISAE 3000) (December 2003) issued by International Federation of Accountants (IFAC), with the criteria using "The Guidelines for Calculating CO2 Emissions" (the "Company's Standards"), shown on the page 29 of the Report which the Company compiled drawing upon references including "Environmental Performance Indicator Guidelines for Organizations (Fiscal Year 2002 Version) (April 2003), "Guidelines for Calculating Greenhouse Gas Emissions from Organizations, Draft 1.6" (July 2005) issued by Ministry of the Environment, Government of Japan and "The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, revised version" (May 2004) issued by the World Business Council for Sustainable Development (WBCSD) and World Resources Institute

#### 3. Procedures Performed

We have performed the following review procedures;

- ① Examined the formulae stipulated in the Company's Standards for calculating the Indicators including CO2 emission factors selected by the Company.
- ② Assessed the Company's procedures used for the collecting the Indicators.
- With respect to the way of collecting the Indicators and the process flow of calculating them, interviewed the Company's responsible personnel and reviewed the systems and processes used to generate the values of the Indicators.
- ③ Compared the Indicators on a sample basis with the supporting evidences to test the conformity in calculating the Indicators to the Company's Standards.
- Made on-site inspections of the Company's facilities.

#### 4. Results of the Procedures Performed

We believe that our review procedures provide a reasonable basis for our conclusion.

As a result of the procedures performed, we are not aware of any material modifications that should be made to the Indicators in the Report in order for them to comply with the Company's Standards for the rational collecting, compiling and reporting such information.

Our firm has no interest in the Company which would have to be disclosed pursuant to the provisions of the Certified Public Accountants Law of Japan.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.

Osaka, Japan May 15th, 2006

#### The guidelines for calculating CO<sub>2</sub> emissions

Item	Applicable Area	Calculation Standard
CO <sub>2</sub> emissions relating to fuel consumption	Global	Guidelines for Calculating Greenhouse Gas Emissions from Businesses (Draft 1.6) by the Ministry of the Environment, Japan
CO <sub>2</sub> emissions factor relating to purchased electricity	Japan	CO <sub>2</sub> emissions per basic unit for power sources at the receiving end, listed in the Environmental Action Plan of the Electric Industry issued by the Federation of Electric Power Companies of Japan in September 2005. The level for fiscal 2006 has been estimated at 0.421 kg CO <sub>2</sub> /kWh, the same level as in fiscal 2005.
	Outside Japan	Numerical values for respective countries listed on the Calculation Tools in GHG Protocol website by World Business Council for Sustainable Development (WBCSD) and World Resource Institute (WRI) Levels for 2002 (ElectricityHeatStreamPurchase_tool1.0_final) has been used for all years.
CO <sub>2</sub> emissions per basic unit	Japan	CO <sub>2</sub> emissions ÷ (nominal production ÷ corporate goods price index*) * Average corporate goods price index (electrical equipment), announced by the Bank of Japan for the period April 2005 to March 2006
	Global	CO <sub>2</sub> emissions ÷ (consolidated sales ÷ corporate goods price index*) * Average corporate goods price index (electrical equipment), announced by the Bank of Japan for the period April 2005 to March 2006
Energy-conservation rate	Global	Amount of energy consumption reduced through the current fiscal year's measures

# Social Responsibility

### Aiming to be a company trusted and respected by all stakeholders

Matsushita is endeavoring to become a company trusted and respected by its customers, local communities, business partners, and all other stakeholders, based on its belief that "a company exists for society by being supported by the various stakeholders from that society." To this end, we, from senior management to employees, have complied with management philosophy and our Code of Conduct since the foundation of the company and have been making efforts to fulfill our corporate social responsibilities.

Water in the pond and the underground reservoir can be used as gray water in an emergency (Pond immediately after its completion).



"Sakura Hiroba (Sakura Garden)": We converted land belonging to the company in Makuhari New City in Narashino City, Chiba Prefecture, and in Kadoma City, Osaka Prefecture, into parkland planted with cherry trees, to help in our coexistence with the global environment, and to contribute to local communities and the urban landscape. Opened on April 2006, the parks provide local residents with places for recreation and relaxation, and also function as evacuation sites in the event of a serious emergency (Photos at right and bottom taken in Makuhari).



### Social Responsibility

### Initiatives for our "Customer-Comes-First" Ideal

### Incorporating customer feedback into products and services



Also in Matsushita's Sustainability Data File: Quality policy/organization Offering safe products and services Incorporating customer feedback Customer care system Integrated Customer Contact Center established

At Matsushita, we are continuously striving to ensure our customers are more than satisfied with our products and services. Since Matsushita's founding, we have carefully managed quality in all our operations—from product planning and design, to manufacture, marketing, and after-sale service—based upon our "customer-comes-first" perspective.

### Matsushita's policy on our quality and CS (Customer Satisfaction)

In addition to the Corporate Quality Division and the Corporate CS Division, we have established quality and CS divisions in each business domain company and set company-wide policies and regulations to improve quality and CS standards.

To ensure further enhancement of quality and CS standards, we think it important to establish a mechanism to incorporate customer feedback into management promptly. To this end, each business domain company has set up and endeavored to upgrade their systems for incorporating customer feedback into product design.

In fiscal 2006, building on the expertise gained through our previous initiatives, we established an "Early Quality Monitoring System (Yellow Card System)" as a Corporate-wide Controlled Model and completed the introduction of this system into all business domain companies.

Specifically, we established a dedicated department in charge of regularly analyzing customer feedback. The department detects any sign of quality problems at an early stage and reports this to executive management, relevant department managers and staff to enable them to respond quickly to the issue. The system also includes a mechanism to measure the effectiveness of its operations using evaluation indicators to facilitate improvements.

From fiscal 2007 onward, we will expedite the introduction of this system on a global scale and strive to realize business management appropriate for the conditions of each market across the world.

To further enhance our customer care system, we established the "Integrated Customer Contact Center" in fiscal 2007 by consolidating customer care functions previously distributed across business domains. (Refer to "Integrated Customer Contact Center established" in Sustainability Data File on our Website.)

### Customer feedback as "a starting point in product development"

We regard the voice of customers (VOC) as the starting point of product development, as well as the starting point for quality improvement. The case of product improvement based on voice of customers is introduced on page 33, and the flow of incorporating customer feedback into product development is described below.

For example, Panasonic AVC Networks Company (PAVC), a internal division company of Matsushita Electric Industrial Co., Ltd. that manufactures AV equipment such as TVs and DVDs, set up a VOC Office. The office studies and analyzes opinions and requests gathered through Customer Care Centers and

user feedback cards to prepare a "VOC Improvement Request Report." This report is then used throughout the planning and development processes to promote product improvement. This process also involves efforts to manufacture user-friendly, easy-to-use and easy-to-understand, universal design (UD)

In 2005, PAVC won the "Gold Prize" of the Contact Center Award hosted by RIC TELECOM and received the "2006 CRM\* Best Practice Award" from the CRM Association.

Our efforts to establish a system for incorporating customer opinion into product improvement activities are not only undertaken in PAVC but also at various manufacturing sites in divisional companies.

\* CRM: Customer relations management

### Efforts being made in the electronic devices

Panasonic Electronic Devices Co., Ltd. (PED), which manufactures and sells electronic components, does not deal with general consumers but with corporate customers. In 1997 the company started its endeavors to improve CS, with regard to automobile and electrical appliance manufacturers.

Specifically, the company conducted a survey on its performance as compared with other companies in the same industry in terms of its abilities in proposing products, capability to respond to production requirements, and speed of response to problems when they occurred. The results of the assessment were then reflected in our products and services. We continuously improve the methods used for our CS surveys.

In 2005, the scope of the CS survey was expanded to include distributors and business units within the group. The survey is conducted in more than one departments/sections of the companies in order to make multi faceted evaluations.

Moreover, top-level meetings to exchange opinions are frequently held between client companies and PED. This is to create a cooperative relationship to realize better manufacturing through concrete discussions concerning the expectations of client companies and how PED can respond to such expectations.

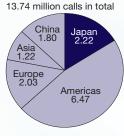
## All of the company's 14 business domains

In fiscal 2006, an Early Quality Monitoring System was introduced to all business domain companies. Quality problems are represented in an easy-to-understand manner, using a "yellow card" or "red card" according to the level of importance of the issue.

### Responding to customer inquiries

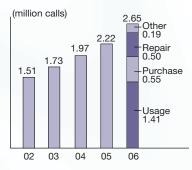
In fiscal 2005, Matsushita received 13.74 million questions and complaints worldwide (Graph 1). In fiscal 2006, we responded to 2.65 million guestions and complaints in Japan (Graph 2), recording a 19% increase from the previous year. The breakdown shows that usage-related questions account for a significant percentage of the total number of inquiries, related in particular with the spread of new digital and information equipment, such as DVD recorders and facsimile equipment. In addition, we received 0.17 million questions and complaints by e-mail, with the number of e-mail inquiries continuing to rise.





\* Number of calls in fiscal 2005 Excludes calls to service center hotlines. Geographic divisions were changed this fiscal year.

#### Graph 2 Customer calls over time (Japan)



### Immediate response to accidents caused by our FF-type kerosene heaters

During 2005, five serious accidents occurred in which users of our FF-type kerosene heaters either died or were hospitalized from exposure to carbon monoxide exhaust from the heaters. These heaters were manufactured by Matsushita between 1985 and 1992 and were only marketed in Japan. Matsushita took immediate measures in response to these accidents, and in order to prevent the recurrence of such incidents, we commenced a thorough reassessment of product safety, covering both our design and manufacturing processes. For details, please refer to the Sustainability Data File.

### Stakeholder opinion

It is highly evaluated that Matsushita has introduced a "Yellow Card System" to all divisions of the Matsushita Group and established the Integrated Customer Contact Center. How are these systems are different from the Matsushita's previous initiatives?

(In relation to the initiatives for universal design (UD) on pages 33 and 34), it seems that various efforts have been made to this end. Is the viewpoint of ease of use for children also incorporated?



Michelle Tan, Professor of the Faculty of Law & Policy, Tezukayama University

### Matsushita reply

By means of the Yellow Card System, any sign of a problem can be visualized and shared by site managers and all relevant divisions so that they can all work together and respond to customers' needs promptly. The Integrated Customer Contact Center is designed to collect customers' opinions at a single point of contact. The Center can also help enhance the ease of use of products intended to be connected to a network in the future.

As for "ease of use for children," Matsushita has made arrangements to ensure safety by establishing internal safety criteria. We also pay due consideration and exercise ingenuity according to product features, such as a foot stool for children, which are incorporated into our custom kitchens, and sliding doors that can be easily opened by anyone—regardless of height. Matsushita intends to continue to reinforce its efforts for user-friendliness for children through participating in the Kids Design Association.\*

An association jointly established by the Ministry of Economy, Trade and Industry and the business community to promote research projects and commendation programs in relation to children. The association aims at establishing a society where children can live safely and securely.

### Initiatives for our "Customer-Comes-First" Ideal

### Promoting Universal Design (UD) and providing convenient Functions to more customers



Related Information: UD product development stories in "isM" panasonic.co.jp/ism/ud/(in Japanese only) national.jp/ud/(in Japanese only)

Matsushita aims at making customers' lives more comfortable and satisfying by stipulating its UD Policy and paying sufficient attention to the requirements of more people through our products and services.

### Matsushita's policy on UD

Based on our UD Policy, six specific elements are stipulated, such as "making operations easily understandable." For the "V Products" that we view as our engine for growth, it is an indispensable prerequisite to introduce the UD concept, but in fact the UD concept is gradually being introduced to all of our

To produce UD products, it is important to study human beings in order to identify human characteristics and behaviors. We study what will reduce the stress felt by users and what will make them feel the product is suitable to them. The ultimate goal of universal design is to create a product whose functions can be used with complete control by each consumer according to their needs. It should also be a product that does not generate a digital divide crisis.

The results of our studies of human beings have been incorporated into company-wide UD regulations and design standards, utilized in product planning and design processes, as well as in technology developments that will realize UD functions.

### Seminars for learning the spirit and practical methods of UD

The company holds UD seminars for all employees to expedite our initiatives for universal design. Specific seminars to learn about ergonomics, life engineering, and usability evaluation methods have been arranged to contribute to producing safer, easier-to-use products. Through these seminars, we are reinforcing our programs for manufacturing user-friendly products.

Figure 1 Universal design and usability sound information. Level of usability Can use freely Realizing universal design User-friendly Concept of pursuing usability of products and expanding user bases Easy to use Barrier-free Usable Accessibility (but difficult to use) Usability of a product User Cannot use (e.g. visually impaired) Persons The elderly Persons with Persons (impaired sight mild disabilities with severe without disabilities or cataracts) disability (blind) (low vision)

### Responding to customers' voices to develop more user-friendly products

To make use of the valued opinions and requests from customers in our UD-based product developments and improvements, Matsushita established the Pana-monitor system. About 350 people—mainly housewives, aged from their 20s to 70s—are currently registered as participants. They perform a wide range of activities, evaluating products and functions from the idea stage, through development, to prototypes and after market launch. Customers' opinions, including from the elderly and people with disabilities, are also utilized for product development and improvements.

As digital broadcasting and digital contents evolve and become more popular, customers have increasing requirements for enjoying high-quality images and sound at home. To respond to such requests, in April 2006 Matsushita launched a new product—the VIERA flat-panel TV, featuring the "VIERA link," which enables easy connection and operation of AV equipment. Providing connectivity with DIGA DVD recorders, AV amplifiers, and other supported equipment by means of an HDMI\* cable, the VIERA link offers users high-quality images and sound through digital transmissions. With a VIERA remote control, users can easily execute various "record" and "play" operations, and, the power to all connected equipment can be turned off in a single operation.

We have made many improvements to a variety of our products, and Matsushita introduces such improvements on its website, soliciting customers for further comments on its products.

\* HDMI: High-Definition Multimedia Interface. A digital interface standard for next-generation digital TVs. Control signals can also be transmitted, in addition to digital and high-definition image and



on the top and the reverse of the remote control. This enables a user to transmit a signal from the remote control while holding it vertically and looking straight at the buttons

## transmitters

Two IR transmitters are placed

### Applying UD concepts to our website

The Internet eliminates barriers in society and offers new possibilities to the physically challenged.

Matsushita has introduced universal designs into its website. Our web accessibility and usability guidelines stipulate that text and background colors must make an easy-to-read contrast. It also specifies a notation system for accurate reading when using screen-reading software. In addition, assessments based on the guidelines were conducted at about 100 business units that provide contents to the website. Based on the results, we defined our top priorities and other priority issues for website improvement.

### Custom-made hearing aids created through a fusion of advanced technologies and manufacturing capabilities



Custom-made, in-the-ear hearing aids are being made through a fusion of state-of-the-art electronics and the techniques of our skilled workers. In-the-ear hearing aids incorporate a microphone, amplifier, and receiver in a case fitted exactly to the shape of the user's ear canal.

Matsushita has developed a "digital hearing aid" and a "fitting controller" capable of finely adjusting the frequency and sound pressure depending on a person's acoustic transmission characteristics within the ear.

The expertise of skilled workers and craftspeople is required to make a product tailored to an individual ear canal. Toshio Watabe, in charge of custom-made hearing aids at Matsushita's Healthcare Business Company, received the 1st Japan Manufacturing Grand Prix from the Prime Minister. He was also commended by the Minister of Health, Labor and Welfare as a Contemporary Master Craftsman.

### New "Bone conduction system" introduced into handset of personal fax machines



Bone-conduction type cordless handsets are available as auxiliary equipment for our personal fax machine.

Bone conduction is an auditory mechanism that converts sound

into vibrations and conducts them through the bones of the skull directly to the inner ear without passing through the outer and middle ear. Bone-conduction type handsets enable people with weaker eardrums and those who have difficulty in hearing voices on the phone to get much more enjoyment from their conversations.

### Working on UD right from the component development phase



Efforts for universal design begin with considerations about a single component. Panasonic Electronic Devices Co., Ltd. (PED) has taken up "the pursuit of human interface technology devices" as its theme and develops and produces ergonomically designed switches for automobiles, key buttons for mobile

phones, and remote controls for AV equipment.

For example, a multi-jog button (rotating button) developed by PED is used on the remote controls of our DVD recorders. These controls are not only full of useful functions, but everyone will find these controls easy to use.

### "Portable voice output communication aid," providing the joy of conversation for people with diminished verbal skills



People who have a speech impediment, who experience dysfunction of their upper body, who suffer from amyotrophic lateral sclerosis (ALS), or other incurable diseases cannot easily put their thoughts into in words.

Mitsuharu Matsuo lost his father to ALS. His father died as he was trying to communicate something. Matsuo was devastated by the loss of his father, and established Funcom Co., Ltd. using an intra-company venture fund program and then began to develop his "Let's Chat" portable voice output communication aid. Characters in hiragana (Japanese phonetic characters) are emitted in sequential order along with a voice guide. By pressing a switch, that can be customized according to the degree of disability, hiragana characters are specified and then displayed on the liquid crystal screen. Often-used phrases, such as various greetings, can be easily registered.

The utmost emphasis is placed on stability in use and the equipment has a simple design. This is based on the belief that nothing gives people more security than communicating in words. "Let's Chat" provides us with an important lesson when we consider just how technology should really work for everyone.

### Social Responsibility

### **Ensuring Information Security**

### Keeping pace with the progress of the digital network society

One of the seminars held all over the world. The number of information security guidebooks distributed to employees stands at more than 650,000 issues worldwide.

## 655,100 guidebooks

It has become increasingly important to ensure information security in parallel with social changes, the progress of digitalization, and the network society.

Matsushita has built comprehensive information security systems in our endeavors to protect personal information and other information.

### Matsushita's policy on information security

Matsushita stores a great deal of information, including information about consumers, as well as our own corporate information. We take maximum care to prevent any leakage of personal and other information.

Matsushita has established and globally applied an "Information Security Policy" and a "Privacy Policy." In both personnel and organizational terms, we provide educational and awareness-raising programs and conduct appropriate auditing. We use both IT and physical control tools to actively ensure safe information management and utilization. At this point, we have still not completely eradicated information security incidents, such as loss of employees' personal computers, or sending Faxes or e-mails to wrong addresses. When such an incident occurs, however, we will notify customers, disclose relevant incident information, report this to competent government organs and take other appropriate measures to prevent recurrence by giving the highest priority to the safety of customers.

Matsushita aims at creating an organization in which information security measures are in place throughout its business flows. We will continue to reinforce our efforts to establish a corporate culture conducive to thorough and effective information management.

#### Building information security arrangements

Matsushita has stipulated the "Matsushita Group Global ISM Standards" in compliance with the ISO/IEC 27001 standards and fully enforces these rules for Directors, Executive Officers, and all employees of the group (about 330,000 persons) as globally unified rules. We have also formulated separate guidelines designed to accommodate regional characteristics and the nature of each division to ensure the most effective information security management.

### (1) Education and awareness-raising for employees

In addition to enhanced training programs for new employees and newly-promoted employees, we distribute introductory guidebooks on information security and conduct e-learning programs. We also provide explanatory pamphlets on our globally unified rules in Japanese, English, and Chinese. We are striving to effectively educate all employees by means of awareness posters, events conducted during special focus periods, and other educational tools.

#### (2) Information security management audit

Based on the above rules, the company conducts internal audit of its information management. Audit items include comprehensive basic management measures and also more specific issues characteristic of the individual division being audited. Qualified personnel who have completed the appropriate information security training programs conduct this audit.

#### (3) Acquiring Privacy Mark certification

In response to full-fledged enforcement of the Act on the Protection of Personal Information in April 2005 in Japan, Matsushita aims to obtain Privacy Mark certification by all 36 group companies. Privacy Mark certification is granted to businesses that conduct proper handling 松下電器産業(株)は 2006年3月、日本情報 of personal information. Matsushita Electric Industrial Co., Ltd. and seven other group companies were granted certificates by the end

Privacy Mark logo

#### Plans for fiscal 2007

of March 2006.

At Matsushita, we regard information security as an important part of reinforcing our business base and are endeavoring to create a corporate culture that facilitates scrupulous information management. In fiscal 2007, the company will place an emphasis on the following three objectives:

- (1) Creating an organization that sustains autonomous information security enhancements on a global scale;
- (2) Reinforcing information security in manufacturing, such as protection of technical information, and enhanced supervision of business partners;
- (3) Implementing programs to acquire information security certification by improving our auditing systems.

# Fully implementing "Super-honest" management



Our company-wide, self-governing management system helps us create a corporate culture that works to prevent the violation of legal and ethical standards.

#### Matsushita's policy on fair business practices

Matsushita Group desires to remain a group that conducts fair business activities and genuinely fulfills its accountability based on our "super-honest" ideal. In particular, adherence to legal and ethical standards in all business activities is a major prerequisite for continuing the existence of a company and an essential part of running a business. Matsushita is working to build a corporate culture capable of sincerely governing itself.

#### **Compliance Committee**

In fiscal 2004, Matsushita established the Compliance Committee, which is headed by the President and made up of associated Directors, Executive Officers and a Corporate Auditor. The committee meets twice a year to implement company-wide policies and confirm the progress being made, for example, in the compliance of global business divisions with tariffs, export controls and other regulations, in addition to our overall priority of fair trade practices. In fiscal 2006, the committee urged all company divisions to support a law-abiding stance both at home and abroad and to create a corporate culture that dynamically promotes total compliance. The group companies in each country and region, in turn, reviewed their compliance with competition laws and strengthened other efforts regarding compliance with ethical and legal standards at each work site.

#### Promoting fair trade practices

Matsushita has, in the past, violated some laws and regulations, relating to fair trade both in Japan and abroad. We have taken this matter very seriously and made a strong determination not to do any violation of those laws, and regulations nor even suspicious conducts. Accordingly, the company has reinforced its efforts regarding compliance with laws and regulations relating to fair trade practices, such as competition laws and bribery regulations.

Since fiscal 2004, our domestic sales and marketing divisions have appointed Fair Trade Officers to promote fair trade practices at on-site locations. Since fiscal 2006, regional headquarters and marketing companies outside Japan have also appointed Fair Trade Officers as part of a system for complying with laws and regulations and to improve and reinforce educational and awareness-raising efforts on a country or regional basis.

#### Promoting compliance with trade laws

As Matsushita is involved in global trading activities, we rigorously implement various initiatives to ensure compliance with the trading laws and regulations of each country. In particular, since its accession to the WTO in 2001, China has introduced a series of new trade legislation. In response to this, the company has strengthened the functions of its legal and import/export operation divisions.

In terms of security export control measures, many countries and regions are endeavoring to build up efforts based on international agreements, such as UN resolutions. To ensure that Matsushita's products and technologies are not used for arms, weapons, or terrorist purposes, sales and marketing divisions and business domain companies have appointed export control officers to ensure that we "do not take part in any suspicious trading" and that we "follow due procedures according to relevant laws and regulations." We are also promoting educational and awareness-raising programs for domestic and overseas subsidiaries companies and have enforced stricter internal auditing systems.

#### Plans for fiscal 2007

Matsushita has maintained legal affairs divisions at the head office, business domain companies, regional headquarters outside Japan, and leading subsidiaries. Since April 2006, the Legal Affairs Division at head office (and similar divisions at business domain companies' head offices) have enhanced and strengthened their compliance-related functions such as planning and the formulating, promoting and monitoring of rules relating with compliance. Also, in our operations outside Japan, we are aiming to enhance the network of legal affairs divisions, centering on regional heaquarters outside Japan, to deal with issues common to specific countries and regions as well as those that concern individual localities. In particular, we will support anti-corruption activities through observing related laws and regulations and preventing the conducts violating of competition laws, such as actions that obstruct parallel trade.

The laws and regulations with which we must comply are wide-ranging from competition laws and other various business laws relating to specific business operations, to broader issues relating to corporate ethics. To comply thoroughly with such laws and regulations, the Legal Affairs Division at the head office has defined detailed criteria to measure the achievement of educational and awareness-raising programs to ensure the successful implementation of compliance-oriented management. Based on these criteria, business domain companies and affiliated companies will objectively determine their progress in compliance initiatives and further strive to make continuing improvement in compliance promotion activities.

# Social Responsibility

#### Relationships with our Business Partners

## Fulfilling our corporate social responsibilities together with business partners



Related information: Green Procurement panasonic.net/eco/suppliers/

Matsushita aims to contribute to creating a sustainable society in cooperation with its approximately 9,500 suppliers around the world, and all our other business partners.

#### Matsushita's policy on partnerships

Based on its policy of Mutual Prosperity, Matsushita has striven to establish beneficial partnerships with the retailers of our products, and with the suppliers of electrical and electronic components and raw materials. In particular, we are promoting CSR-oriented Procurement activities on a global basis, in view of implementing our corporate social responsibilities through our supply chains in fiscal 2006.

#### Green procurement and audits of suppliers' environmental quality assurance systems

Matsushita started green procurement initiatives in fiscal 2000. Since fiscal 2004, we have requested material suppliers to provide non-use warranty for chemical substances as part of our efforts to comply with the RoHS Directive. Prior to the enforcement of the RoHS Directive in the European Union, slated for July 2006, in October 2005 Matsushita successfully discontinued use of specified chemical substances (lead, mercury, cadmium, hexavalent chromium, and two specified brominated flame retardants [PBB and PBDE]) in all our products that will be subject to the Directive, on a global basis (page 25).

Since fiscal 2005, we have continuously implemented Audits of Suppliers' Environmental Quality Assurance Systems to ensure overall quality and environmental compliance.

#### Promoting CSR-oriented procurement

In December 2004, Matsushita issued a Clean Procurement Declaration to ensure thorough compliance in our material procurement transactions. We stipulated an employee code of conduct and compliance specifics, such as a rule to prohibit employees from accepting any supplier invitations to dinners or other business entertainment. In addition, we established a Fair Business Hotline for suppliers to contact Matsushita with concerns or questions.

In our Clean Procurement Declaration, Matsushita provides the following standards as criteria for selecting material suppliers, in addition to the supplier's agreement to comply with legal and social ethics and the company's basic management philosophy and Code of Conduct. We also provide fair competition opportunities according to the following standards.

#### **Supplier Selection Standards**

- 1. Assurance of the required quality and safety
- 2. Consideration of the environment
- 3. Advanced & High technology and development capability
- 4. Competitive pricing
- 5. Fulfillment of the on-time delivery
- 6. Stable operation infrastructure
- 7. IT-based flexibility to changes
- 8. Consideration of human rights, and labor safety and hygiene

To secure the thorough and global implementation of our initiatives, in fiscal 2006 we began to revise our Basic Purchasing Agreement and to enter into new agreements with our suppliers. The main revisions concerned labor safety and health, information security, and respect for human rights, including bans on child and forced labor.

#### Plans for fiscal 2007

We will complete the signing and renewal of Basic Purchasing Agreement between all our group companies around the world and their suppliers. We will also introduce an Evaluation Systems of CSR-oriented Procurement as a framework for selecting and managing suppliers. In addition to current indices of quality, cost, delivery, and service (QCDS), as well as management, financial status, and environmental activities, the system evaluates supplier performance in human rights, labor safety and health, and information security. This system is designed to provide a comprehensive evaluation by means not only of confirmation of each supplier's compliance with requirements using documents at the signing and renewal of Basic Purchasing Agreement, but also through preliminary reviews and regular auditing during the contract period. The system encompasses the assessment of the upstream suppliers of Matsushita's material suppliers.

Matsushita will strive to contribute to the realization of a sustainable society by globally implementing the Evaluation Systems of CSR-oriented Procurement as a basic policy for managing material suppliers, as well as entering into contracts and placing orders with superior suppliers.



# 7,700 sites

Matsushita has conducted Audits of Suppliers' Environmental Quality Assurance Systems at approximately 7,700 sites for material procurement. From now on, we will implement audits based on the Evaluation Systems of CSR-oriented Procurement. (Photo: Auditing at a supplier in Thailand.)

#### Supporting suppliers in Indonesia

Matsushita also endeavors to support suppliers in each region. In October 2005, the Third Reverse Trade Show on components and parts was held in Indonesia. The Trade Show attracted 78 companies, including 31 Japanese-affiliated companies from the electric and automobile industries, which serve as the main driving force of the Indonesian economy.

In this Reverse Trade Show, a finished product manufacturer exhibits the components, parts and molds for which it is seeking a local supplier. This type of trade show was started by PT Panasonic Manufacturing Indonesia (PMI), Matsushita's manufacturing subsidiary in Indonesia, three years ago. The show has grown through the support of the Indonesia-Japan Economic Committee and has contributed greatly to the local economy.

#### "Matsushita Konosuke Shogakuin" - an institute to train successors for retail businesses

Many of Matsushita's electrical home appliance and digital consumer electronics are sold in Japan by local electrical appliance retailers. Matsushita Konosuke Shogakuin was set up to help foster the successors of such local retailers. It was established in 1970 in response to a strong request by the owners of local retailers who were then suffering from a shortage of successors.

The philosophy for establishing the institute is based on Matsushita's basic policy of "To make people before making products." It aims at all-round education encompassing moral, physical, and intellectual education. Students learn not only knowledge and skills but also appropriate views on life, society, and business. They can achieve personal development, cultivate the will to overcome difficulties, and tutor their minds and bodies through one-year residential training. All of the students study to qualify for Second Class Electrician certification, indispensable for operating an electrical retailer business. Students also learn skills relating to administration and sales, such as financial and legal affairs, and managerial and marketing skills.

The institute is a type of "life-training dojo" for young successors. More than 4,600 graduates have returned to their home cities and towns to be managers of their own retail stores. Many of the graduates are also exhibiting leadership in their local communities—and have become Matsushita's indispensable partners.

#### Stakeholder opinion

It is to the company's credit that Matsushita not only revised its Basic Purchasing Agreement and concluded revised contract with its suppliers, but is also striving to verify suppliers' actual performance by means of the newly-established Evaluation Systems of CSR-oriented Procurement. However, in order to be a respected company, not just a trusted company, it is important for Matsushita to continue its efforts to share its motivationthe reason why the company strives to promote CSR-oriented

Procurement—with its suppliers. At the same time, it is important for the company to listen carefully and seriously to what suppliers really think about Matsushita's strategies for promoting CSR-oriented Procurement.



One Akivama. President, Integrex Inc.

#### Matsushita reply

As introduced in "Promoting CSR-oriented Procurement," we have asked our suppliers to agree to our basic policies, such as the Management Philosophy and Code of Conduct. We also strive to communicate our motivation through our own conduct based on the Clean Procurement Declaration. However, we admit that our efforts are still insufficient. We will continue to make efforts to share our inspiration for promoting CSR-oriented Procurement with all our suppliers.

To be attentive to suppliers' voices, we have established the Fair Business Hotline, in addition to increased opportunities for dialogue. To comply with the Whistleblower Protection Act enforced in April 2006, we have informed all our suppliers of the Act to secure fairer and more open procurement practices.

# Social Responsibility

#### **Corporate Citizenship**

### Corporate citizenship activities

# - Empowering society, the company, and employees



Our Corporate Communications web pages provide more detail on Matsushita's global corporate citizenship activities.

http://panasonic.net/citizenship/

Matsushita is implementing corporate citizenship activities on a global basis in order to act as a responsible corporate citizen. Based on the ideas of fostering (nurturing people) and coexistence (living in harmony), we are engaging in activities focused on three key areas: "children," "the environment," and "the community"

#### Matsushita's policy on corporate citizenship activities

In addition to "contributing to society through our business operations," we have made efforts to realize an affluent society through a wide range of corporate citizenship activities as a corporate citizen.

In fiscal 2006, we decided to place priorities on activities related to "children," "the environment," and "the community," based on the ideas of "fostering" and "coexistence."

#### [Children] Hand-made battery classes

Matsushita Battery Industrial Co., Ltd., which takes charge of Matsushita's battery business, has held hand-made battery classes since the 1980s as a part of a factory tour, providing children with an opportunity to experience the fun of science and to make a real working battery.

Currently, the company dispatches employees to elementary and junior high schools as lecturers for the schools' integrated-study classes, which were introduced in fiscal 2003. Our employees give on-site battery classes, using our original battery kits. Since fiscal 2004, we have also been holding virtual battery classes using video conferencing systems and mobilephones to provide even more classes. More than 10,000 students participate in our on-site and virtual battery classes each year.

#### [Environment] School forestation project

Matsushita supports a "school woodland project" to emphasize the importance of coexistence with the global environment, hoping the healthy growth of children through experiencing in nature.

Many of the school forestation established throughout the country in the 1940s and 1950s have become places where children cannot enjoy themselves because these forestation have not been well cared for in later years. To enable children to have an opportunity to learn in the midst of nature and gain valuable experiences, Matsushita has supported a school forestation improvement project promoted by the Organization for Industrial, Spiritual, and Cultural Advancement (OISCA) since fiscal 2003.

In 2005, a forum to develop home towns by using school forestation was held for the first time in the Tokyo metropolitan area. School teachers, local residents and Matsushita employees, improve the forestation that had been off limits in the past. The improved woodlands have become indispensable for a range of school activities, such as environmental studies, and are also used for music concerts and public poetry readings.

#### [Community] Okayama Kibi Highlands Wheelchair Racing Competition

This event was held with the aim of promoting human relationships in the community with the support of the Japan Sports Association for the Disabled, the Okayama Prefectural Government, and several other organizations. Participants in wheelchairs and runners participate on the same course. Kibi Matsushita Co., Ltd., an affiliated company that employs persons with severe disabilities, has served as a secretariat for the event every year since 1996, and has supported the event in cooperation with local volunteers, companies, and various organizations. 112 runners in wheelchairs and 1,210 runners took part in the 2005 road race.

#### Supporting employees' volunteer activities

To encourage employees in Japan, their families, and retirees to take an active part in volunteer activities and support the work of volunteer organizations, Matsushita has promoted the "volunteer activity financial support program" since 1998. This program is designed to support such activities by providing a portion of the necessary funds.

#### Major groups supported in fiscal 2006

- Mishima Children's Culture Station
- · Society for the Beautification of Myojin River
- The Kyoto Society for Childbirth Education
- Hiyashinsu
- · Recycling Craft Center and Bamboo Charcoal School
- Nara Association of Volunteer Tour Guides
- Mio no Kai (Osaka Support Group for Parents of Troubled Children)
- Hyogo Heritage Organization (Kobe Chapter)

Matsushita also confers the "President's Award for Social Contribution" to employees who continue corporate citizenship activities for 10 years or longer, receive a high commendation from local communities, and set an example for all other employees.

FY	Activity	Award winner
2005	Enjoying pantomime with people with hearing difficulties	Koji Yoshimoto
2006	Ski school for people with disabilities	Yasushi Koishihara



Students who studied at Japanese universities under the Panasonic Scholarship Program are taking an active part in companies and universities in their own countries. (President Shimada of Panasonic Scholarship Inc. (center) and scholarship program graduates and students)

# 2()() Panasonic Scholars

#### Panasonic Scholarship Program

Matsushita established its Panasonic Scholarship Program in celebration of its 80th anniversary with the aim of developing competent personnel who can make significant contributions to the development of Asia and to international and mutual understanding and friendship. Since 1998, Matsushita has subsidized the cost of studying on a master's degree course at a Japanese graduate school of science and technology for university graduates from Asian countries. In fiscal 2006, we awarded scholarships to 20 people. Since its establishment, 200 students have become Panasonic Scholars.

We will maintain this scholarship program so that Asian students can apply what they have learned in Japan to industrial development in their own countries.

#### Supporting for disaster relief

Since the Sumatra earthquake and tsunami in the Indian Ocean in December 2004, Matsushita has established a framework for providing support to affected areas by the company and

its employees in the event of a large-scale disaster. Senior management makes quick decisions and they and employees make monetary donations in response. In the last fiscal year, we provided support to the following disaster relief, among others:

Following Hurricane Katrina in the south of the United States towards the end of August 2005, monetary donations were collected from Matsushita group companies around the world for the relief of victims and to assist in the rebuilding of the affected area. A total of 1 million dollars (approx. 114 million yen) was donated by employees and group companies.

Following the earthquake in Pakistan in December 2005, monetary donations were collected from group companies around the world. We provided our dry-cell batteries, flashlights and washing machines, which were urgently required. A total of 54.35 million yen in donations including goods was provided to

After the massive landslide in Leyte Island in the Philippines in February 2006, Matsushita donated 6.1 million yen from its group companies around the world for the relief of the victims and the restoration of the damaged area.

#### Stakeholder opinion

I pay tribute to Matsushita for its continuing efforts to respond to increasingly diverse needs by introducing a series of innovative programs. In the future, I hope that Matsushita will press forward with its CSR initiatives using the following ideas: (1) Matsushita should narrow down the issues to be addressed by the company as a group on a global basis and adopt a unified approach to bringing about solutions. (2) The company should use the advantages derived from its core business (products and know-how) to provide equipment and distribution systems in a

time of disaster and to create a database detailing successful NPO activities. (3) The company should encourage even greater active participation by its employees.



International Institute for Human, Organization and the Earth (IIHOE)

#### Matsushita reply

In fiscal 2006 Matsushita created a slogan for its corporate citizenship activities, "Empowering society, the company, and employees." Based on the ideas of "fostering (nurturing people) and coexistence (living in harmony)," we are engaged in corporate citizenship activities focused on the areas of "children," "the environment," and "the community." In addition, we have now begun to consider the implementation of this policy through our global operations.

We believe that it is important for each employee to think about what he/she can do and act positively in order to create a better society. As frameworks for supporting employee's participation in corporate citizenship activities, Matsushita promotes the Love the Earth Activity and the Matsushita Green Volunteer Club, in addition to the Volunteer Activity Financial Support System introduced in this report. We will continue to reinforce our efforts to establish programs that are conducive to employees' active participation.

#### **Relationship with Employees**

# Creating an employee-friendly workplace that ensures both self-fulfillment for individual employees and productivity improvement for the organization



Also in Matsushita's Sustainability Data File:

Percentage of presidents of companies outside Japan appointed from local staff (by location)
/ Work and Life Support Programs/ The Charter for Matsushita Electric's Occupational Safety and Health/
Other data related occupational safety and health

Matsushita implements a variety of personnel measures consistent with its belief that "people are the foundation of business" and with the idea of "developing people before making products."

We are also making efforts to create a safe workplace for every employee from the broadest perspectives.

#### Matsushita's policy on human resources

We promote human resource development to ensure that our personnel understand the basic management philosophy and accomplish their missions accordingly.

The "Leap Ahead 21" plan, a mid-term management plan begun in fiscal 2005, stipulates "participative management," "performance management," and "respect employees" as our basic stance on human resources. (Figure 1) This has helped the company drive its various initiatives such as the creation of a new personnel system. We are making use of these initiatives to realize a "lively and exciting company" that constantly pursues the self-fulfillment of individual employees and productivity improvement for the organization.

Figure 1 Basic stance on human resources

Participative management
Implementation of the
"customer-comes-first" principle by
autonomous individual employees

Performance management Evaluating and rewarding according to current skills and results Respect employees A win-win relationship between th company and its employees

#### Initiatives to promote diversity

In order for Matsushita to survive amidst fierce global competition and to become a company that can win the support of customers all over the world, it is essential that the company creates a corporate culture that allows its diverse employees to fully exercise their capabilities and potential and to become an active part of the company, regardless of gender, nationality, or age. Based on this perception, Matsushita is implementing the following initiatives.

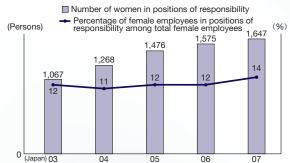
#### Accelerating women's participation in management

Matsushita's active efforts to promote female employees to positions of responsibility started in 1986 when the Equal Employment Opportunity Law came into force. Since the 1999 revision, we have moved forward with the active promotion of motivated women to positions of responsibility based on "Matsushita's positive action program."

In accordance with Matsushita's philosophy of promoting capable and motivated personnel regardless of gender, the Corporate Equal Partnership Division was established in 2001 as one of our management measures for changing corporate culture by further encouraging the participation of women in management. We have introduced some of our active female employees at forums or in internal publications and implemented initiatives for formulating a culture in which female employees can play more active roles within the company.

Thanks to the reform of our corporate culture promoted by the Corporate Equal Partnership Division, along with our previous active efforts to appoint women to positions of responsibility, female workers now play active roles at manufacturing and all other work sites. The numbers of female leaders, women in positions of responsibility, and executives has increased rapidly (Graphs 1 and 2).

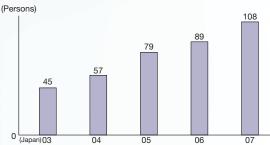
Graph 1 Numbers and percentages of women in positions of responsibility (as of April 1 in each fiscal year)



\* Total for Matsushita Electric Industrial and other group companies with the same working conditions.

People in positions of responsibility: employees that have been appointed to positions such as coordinator or councilor

Graph 2 Numbers of female employees in managerial positions (Section leader or higher) (as of April 1 in each fiscal year)



\* Total for Matsushita Electric Industrial and other group companies with the same working conditions.

Table 1 Numbers of female employees in managerial positions (Section leader or higher) in North America and Europe\*

	North A	America	Europe	
Fiscal year	Percentage of female managers among total managers	Percentage of female employees among total employees	Percentage of female managers among total managers	Percentage of female employees among total employees
2002	20%	34%	NA	NA
2003	20%	33%	NA	NA
2004	18%	32%	9%	43%
2005	21%	33%	9%	43%
2006	24%	33%	11%	41%

\* For North America, figures represent that for Panasonic Corporation of North America, excluding manufacturing.

For Europe, figures represent that for Panasonic Europe Ltd. and its affiliated sales companies.

#### Participating in the operation of **Diversity West Japan Workshop**

Matsushita has been involved in the operation of the Diversity West Japan Workshop since August 2004, as one of the six administrative agents.

This workshop has a membership of 37 organizations and 84 individuals (as of January 31, 2006). The participating companies and organizations hold workshops four times a year to share and study with each other specific initiatives concerning the promotion of diversity and the work-life balance of each company. Participants in charge of promoting diversity of the companies exchange information outside of the corporate framework and reflect information gained from workshops in each part of their job. The aim is to gain momentum for social diversity through expediting initiatives for achieving diversity within companies.

#### **Establishing the Corporate Diversity Promotion Division**



Satoko Matsuda Secretary General. Corporate Diversity Promotion Division

It is essential for Matsushita to flexibly respond to the ever-changing competitive environment and to customer needs, and to build a strong organization capable of making self-sustaining transformations, in order for the company to be acknowledged as a globally excellent company by the year 2010. To this end, it is important to create a flexible and diverse corporate culture that enables employees to learn from different

principles in order to create new value. To nurture such a culture, the Corporate Diversity Promotion Division was established under the direct control of the President in April 2006. This promoting organization will prompt the company to take one step further in its efforts for greater participation in management by women. The Division will also endeavor to promote diverse human resources regardless of age and nationality and implement other initiatives aimed at increasing diversity on a global scale.

#### **Establishing the e-Work Promotion Office**

Matsushita has commenced efforts to introduce "e-Work" widely throughout the company to help create an environment where capable personnel with different backgrounds can demonstrate their talents and personalities to the maximum extent and achieve satisfaction in their work. e-Work includes "teleworking" (working from home) and "mobile working" (a pattern of working where employees work at various places other than their offices using mobile phones and laptops).

Matsushita believes that it is indispensable to promote such flexible working patterns in order for the company promptly to respond to changes in the society. Currently, mobile working is enthusiastically practiced by sales personnel, while attempts are being made to introduce teleworking for planning, legal, technical, and other types of personnel.

"e-Work" is designed to serve as a means of producing a "work-life cycle" that Matsushita proposes as a working style for the 21st century. The company believes that this cycle can produce a beneficial circle in which improving work efficiency to create extra time for a fulfilling personal life can lead to the enhancement of the capabilities and sensitivity of individual employees. Ultimately, their heightened capabilities and sensitivity will manifest in their work. We can create diversified and flexible workplaces where all employees that have various needs for child or family care can balance their job and household responsibilities.

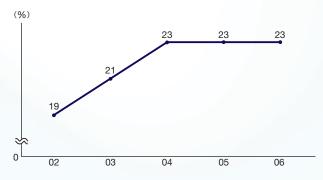
#### Appointing the right persons for the right positions on a global scale

To become a company recognized as outstanding by people worldwide—that is, to achieve global excellence in the fullest sense—it is necessary to recruit excellent human resources from around the world, regardless of race, nationality, age, or gender, and to properly develop and position them.

To that end, since fiscal 2004 when we introduced the Panasonic Global Executive (PGE) system, we have promoted a system to find and recruit excellent human resources from overseas companies, develop them, and appoint them to appropriate positions, from a global perspective.

Matsushita aims to accelerate the localization of management in its overseas companies and to realize appropriate appointments from a global point of view. As our mid-term goal, we are aiming at one out of three of the presidents of our overseas companies being locally appointed.

Percentage of Presidents of companies outside Japan Graph 3 appointed from local staff



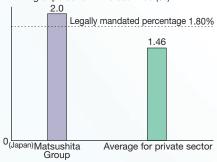
#### Promoting the employment of persons with disabilities

Matsushita strives to be a company where employees can make the most of their abilities and aptitudes and realize their expertise, regardless of any disabilities that may challenge them. In Japan, at 2.0%, we hire a higher percentage of persons with disabilities than is the private sector on average (1.46%) or achieved by legally mandated (1.80%).

Matsushita also runs four special affiliate companies, including three semi-public joint venture companies established jointly with local governments to provide opportunities for persons with severe disabilities to work.

Graph 4 Hiring of persons with disabilities

Hiring of persons with disabilities (%)



\* Total for Matsushita Electric Industrial and other group companies with the same working conditions.

#### Promoting skill development and flexibility for all employees

#### Introduction of a Skill Evaluation System

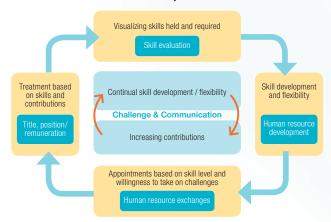
To be a strong organization that receives top honors in each business field, it is essential for Matsushita to constantly transform itself to create a stronger and a more lively working environment.

To that end, it is necessary to heighten capabilities of each employee, that is, to challenge their skill development and flexibility, and enable them to demonstrate their abilities to the fullest extent.

In April 2006, Matsushita introduced a Skill Evaluation System (Figure 1) into all divisions of the Matsushita Group in Japan to promote the "reinforcement of manpower strength" and the "reinforcement of organizational strength." This system primarily aims to visualize each employee's skills based on objective criteria by job type and by business domain. This should facilitate the realization of a work environment where individual employees' efforts to improve their skills, enjoy their work, and take on challenges for greater satisfaction and self-fulfillment can lead to higher productivity and continuous operational improvement at an organizational level.

Based on this Skill Evaluation System, we will change our personnel system as a whole into a mechanism to help each employee quickly develop or change their skills and make use of such skill development and flexibility. Matsushita is striving to realize a "true performance management" and to make a great leap forward to becoming a lean and agile Matsushita that attaches a high value to customers and empowers all personnel to fulfill themselves in their work.

Figure 1 Overview of personnel system after the introduction of the Skill Evaluation System



#### Nurturing technical personnel in China

Along with the progress of the globalization of management, Matsushita has localized design and development functions in China where its manufacturing facilities are concentrated. We hire a substantial number of Chinese engineers every year.

To train the Chinese staff to be an active workforce as quickly as possible, in fiscal 2006 Matsushita started the Chinese Technical Personnel Project in China. Technical and personnel managers of each company consider specifically how to recruit, retain and train local technical staff. In fiscal 2007, the Committee for Chinese Technical Human Resource Development was launched to further enhance technical personnel training. Specifically, we introduced 10 technical training courses and started the development of self-learning CD-ROM materials in Chinese. We have also started training programs at the head office as well as at business domain companies in Japan to train Chinese technical personnel to be active players in local operations and stimulate their motivation.

#### Training program for local executive candidates in China

Since 2004, Matsushita has offered its own MBA courses, in collaboration with Beijing University, to provide training to local executive candidates who will play management roles in the future. These courses also serve to accelerate the localization of the management of companies in China, which is serving as Matsushita's growth engine. Every year, 20 to 30 talented personnel attend this one-year program to learn the essential skills required of today's executives.

# 144 improvements

#### Matsushita's policy on occupational safety and health

With our management of safety and health rooted in the Matsushita ideal of "respect employees," we are working hard to ensure their safety and health, in anticipation of changes in the workplace. In fiscal 2006, Matsushita implemented the following initiatives:

- (1) Established an autonomous management system by means of an Occupational Safety and Health Management System
- (2) Eradicated industrial accidents caused by machinery and
- (3) Improved working environments in terms of noise, dust, and chemicals
- (4) Implemented measures to prevent work-related health problems resulting from overwork and measures to promote mental health
- (5) Adopted measures to prevent health problems from asbestos

In fiscal 2007, we are committed to creating more comfortable workplaces through the steady implementation of the Occupational Safety and Health Management System. We will reduce occupational safety and health risks and enhance safety and health education as well as measures for the primary prevention of health problems.

#### Occupational health and safety management conditions

In terms of safety management, since fiscal 2004 we have focused our efforts on preventing accidents that involve workers becoming crushed by or caught in equipment by conducting risk assessment and through the horizontal implementation of industrial accident prevention measures. As a result, in fiscal 2006—continuing from the previous year—we achieved Matsushita's lowest number of such accidents. We are continuously endeavoring to identify and remove workplace risks.

As for working environment management, we have completed the necessary requirements at 12 out of the 24 sites identified by fiscal 2006 monitoring as requiring improvements. However, the monitoring revealed that an additional 15 sites required improvements. We will therefore continue our efforts to improve conditions at the remaining 27 sites.

On the health management front, we continued health consultations by industrial physicians for employees with long overtime working hours to prevent illness or even death from overwork, which has been a social issue for some time. We are committed to enhancing our mental health measures by introducing the services of specialized external institutions, in addition to our current in-house consultation service and employee education programs.

Moreover, Matsushita conducted a health promotion support campaign to further raise the health awareness of all employees, thus actively supporting our employees' own health promotion activities.



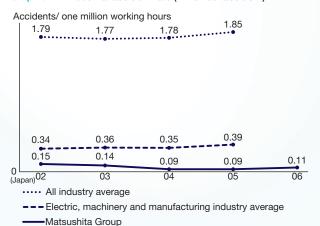
Matsushita's overseas companies are also implementing an Occupational Safety and Health Management System in compliance with local laws. In China, internal audits were conducted at 10 companies in fiscal 2006. The companies made a total of 144 improvements, consisting of 28 improvements in management methods and 116 on the shop floor. (The photo shows improvements made to work desks and chairs for workers with disabilities.)

#### Easing apprehension about health impairment from exposure to asbestos

With regard to health impairment from exposure to asbestos, which became a social issue in Japan in 2005, Matsushita learned that a now-retired employee who worked at its fluorescent lamp factories in the 1950s developed health problems and was approved as eligible for the Workers' Accident Compensation Insurance benefits in July 2005. The worker was involved in the maintenance of buffer materials containing asbestos in equipment and also used asbestos gloves.

Matsushita takes this problem seriously and established a company-wide countermeasures committee in August 2005 to investigate in detail the use of asbestos in Matsushita's products, equipment, supplemental materials, and buildings, going as far back as possible in terms of ingredients, content, usage, and dispersion levels. Where there is a risk of dispersion, we took prompt measures, such as anti-scattering, removal, and replacement work, and have confirmed the absence of asbestos in the neighboring areas. We will conduct health examinations as necessary and continue our health management measures to ease apprehension about the problems caused by exposure to asbestos.

Graph 5 Industrial accident rate (Time-lost accident)



<sup>\*</sup> Excludes Matsushita Electric Works, PanaHome, and Victor Company of Japan

#### Promoting communication between management and employees in China

To enhance communication between management and employees, Panasonic Corporation of China (PC) and other affiliate companies in China are engaged in the following schemes:

- A Workplace Meeting System has been introduced to enhance communications between management and employees, as well as among employees.
- Executives participate actively in sports and cultural events hosted by the company or labor unions to deepen exchanges with employees.
- "Management by objective" has been incorporated into evaluation systems and opportunities are provided where supervisors and subordinates directly discuss tasks and skill development throughout the various stages of their tasks.
- During the opening session of the Management Successor Training Program held annually in China, an Exciting Work Communication Program is conducted to provide local employees with the opportunity to hold direct discussions with senior management such as the Director in charge of personnel affairs at the head office, and executives at regional headquarters.

#### Reorganization in overseas mobilephone operations

Panasonic Mobile Communications Co., Ltd., which operates Matsushita's mobilephone business, decided to phase out overseas 2.5 Generation GSM mobile terminal operation due to severe global competition. The company will concentrate its management resources into next-generation mobile terminal technologies. In line with this decision, we have carried out a reorganization of company business structures in the United Kingdom, the United States, the Czech Republic, the Philippines, and in China, involving the development, manufacturing, and marketing divisions. Unfortunately, we had to announce redundancy of 1,400 jobs including transfers within the Matsushita Group.

In implementing these redundancies and transfers, we worked in close consultation with the labor unions and employee representatives, paying due consideration to laws and circumstances in each country. We also held thorough discussions with each of the employees to help them to make choices that complied with their wishes as far as possible. To those whom we had to ask for their resignations, we paid retirement allowance and offered the best advice and support for reemployment possible according to each retiree with the aid of relevant government offices, peripheral firms, and job placement companies. In the Philippines, we provided seminars on how to make the best use of retirement allowances to help in the future planning of those employees leaving the company.

In the unavoidable event that we have to ask employees for their resignations or transfers in the future due to changes in the business environment, we will provide a full explanation in advance and endeavor to fulfill each employee's wishes to the maximum.

#### Stakeholder opinion

It is important to make efforts to promote diversity in the workplace and Matsushita should be commended for its efforts. With the establishment of the Corporate Diversity Promotion Division in April, I assume that full-fledged initiatives will now begin. I would like to ask how the company will enlarge employment opportunities for diverse groups of people? And how does Matsushita intend to instill its CSR concept in such diverse personnel as a part of their skill development training?

Makoto Teranaka, Secretary General, Amnesty International Japan

#### Matsushita reply

To expand employment opportunities for diversified groups of personnel, Matsushita is actively hiring employees throughout the year and recruiting them overseas. We assign and promote personnel to positions where they can make the most of their abilities. In addition, we will expand the opportunities for diverse personnel to play an active role in their workplace, regardless of age, gender, or nationality by introducing a Skill Evaluation system and realizing a true performance management.

Matsushita regards having a proper understanding of our basic management philosophy as our CSR policy, and their main practical implementations, as one of the basic skills required of its employees. Through our human resource development programs, we will make sure every employee gains an appropriate understanding of these important issues.

# For the Global Future

# Contributing to society through our business activities



"The mission of industrialists is to overcome poverty Konosuke Matsushita, Founder

Amid the advancement of science and technology and economic globalization, various global environmental and social problems have become obvious. It is a common challenge facing humankind to realize a sustainable society without reaching an impasse in these global situations. Matsushita seeks to contribute to addressing these problems through our business activities, based on the management philosophy inherited from our very foundation, and the business vision related with this philosophy. We also believe that it is necessary to implement the initiatives shown in the table on the right in order to fulfill our corporate social responsibilities. This chapter describes our specific efforts in various business domains throughout the world.

\* Further information about efforts in various regions is described in the Sustainability Data File.

#### Six initiatives in CSR activities

Scope	Initiatives
1. All stakeholders	1. Ensure commitment to fairness and honesty
2. Customers	2. Create products of high social value
3. Global environment	3. Pursue ecological intelligence
4. Communities	4. Promote global citizenship activities
5. Business partners	5. Enhance responsible partnership
6. Employees	6. Achieve excellent workplaces



At a daycare center operated by the Matsushita Gobel Education Foundation

### To Forge a Future Society

# Global issues and Matsushita's efforts

The table below clearly shows the relationships between global issues and Matsushita's efforts to address such problems, together with the aims of future initiatives. Matsushita has selected global issues that have a close relationship with our business activities, drawing upon references provided by the World Economic Forum (WEF), the World Business Council for Sustainable Development (WBCSD), the UN Millennium Development Goals (MDGs), and SustainAbility Ltd, etc. "Activity component" indicates the six initiatives in Matsushita's CSR activities described on page 46. "Matsushita's CSR activity" shows our CSR efforts introduced in this report on the specified pages.

Scope	Global issue	Activity component	Matsushita's CSR activity		
House and livelihood	Elimination of poverty		Provision of distance education system (page 52)		
	Living environment (especially hygiene) improvement		Sales of well water pumps in Indonesia (page 56)		
	To restore attenuated family ties	Create products of high	Proposing a house design that encourages closer family ties (page 49)		
	To reduce the impact of excessive working hours and stress on health	social value	Pursuing comfortable bathing system and sleeping environment (page 50) Efforts to prevent illness or death from overwork; measures for mental health (page 44)		
	To deal with the declining birthrate		Promotion of universal design in products and services (pages 33-34, 49-50, and 51)		
	and the aging society	Achieve excellent workplaces	Efforts for diverse working patterns (page 42); Work & life support program for employees (Sustainability Data File)		
	To secure safety of family members; to deal with the increase in crime and mounting insecurity	Create products of high	Home security technologies (page 49) Realization of security and safety using ubiquitous networks (page 51) Communication technologies to protect the elderly and children (page 53)		
	To eliminate the negative impacts of information society (e.g. the "digital divide")	social value	Research on user-friendly interfaces (page 51)		
	To deal with large-scale disasters	Promote global citizenship activities	Disaster support activities (page 40)		
,	To respond to regional conflicts and terrorism	Ensure commitment to fairness and honesty	Promotion of compliance with trade laws (page 36)		
	To solve the issue of insufficient medical services	Create products of high	Provision of distance medical care system (page 52)		
Education system	To address the problem of the shortage of teachers and educational facilities	social value	Provision of distance education system (page 52)		
	To improve education for children	Promote global	Battery classes, school forestation project (page 39)		
	To support higher education and research projects	citizenship activities	Panasonic Scholarship (page 40)		
Transportation	To reduce traffic accidents; to alleviate traffic congestion		Realization of safe motoring society through ITS (page 53)		
	To reduce impact on the environment	Create products of high social value	Reduction of the impact on the environment by ITS (page 53) Contribution to eco-cars through development of in-vehicle components and weight saving (page 54)		
	To respond to air pollution caused by automobiles		Equipment to remove nitrogen oxides from tunnels (page 54)		
	Thorough compliance and elimination of corruption	Ensure commitment to fairness and honesty	Global initiatives to comply with ethical and legal standards (page 36) Strict compliance with ethics and laws in procurement activities (pages 37-38)		
Corporate	To respect intellectual property	,	Efforts to deal with counterfeiting (Sustainability Data File)		
activity	Protection of personal information	Create products of high social value	Efforts concerning information security (page 35)		
	Responsible procurement through supply chains	Enhance responsible	Promotion of CSR-oriented procurement (page 37)		
	To emancipate people from child labor and severe working conditions	partnership	Formulation of a basic agreement stipulating human rights, safety, and hygiene and ban on child labor (page 37)		
	Dialogue between employees and executives		Promotion of communication between executives and employees in China (page 45)		
Employment	Prevention of infectious diseases at workplaces		Efforts to prevent SARS, etc. (Sustainability Data File)		
and labor	Human resource development of workers	Achieve excellent workplaces	Contribution to human resource development in local communities (pages 56-57, 59) To train successors for local retailers (page 38)		
	To eliminate barriers to women's employment		Efforts for diverse working patterns (page 42); Work & life support program for employees (Sustainability Data File)		
	To create a work environment where diverse values are respected		Efforts to promote diversity in workplace (pages 41-42)		
	To prevent global warming		Efforts to prevent global warming in products,		
Protection of the global environment and sustainable development	Restructuring of energy supply systems		manufacturing, and distribution (pages 19-22) Initiatives for Clean Development Mechanism (page 57)		
	To improve energy efficiency; to create new energy sources	Pursue ecological	Effective utilization of new energy sources (page 23)		
	the global environment	intelligence  -	"N's Eco Project" (page 20), "Love the Earth Citizens' Campaign," and "Lights-out campaign" (page 24)		
	To prevent pollution by chemical substances		Minimization of pollution risks by chemical substances (pages 25-26)		
	Effective utilization of resources		Effective utilization of resources (pages 27-28)		

# Proposing Value for a New Lifestyle for the Household —Achieving Factor 5

Matsushita strives for product design with due consideration paid to all important issues. At the same time we are continuously improving eco-efficiency over the entire life cycle of our business activities to help realize a sustainable society where people's needs are met without jeopardizing the potential of future generations. Our Eco & Ud HOUSE represents this message and embodies a future lifestyle.

#### Realizing GHG Factor 5 for One Household

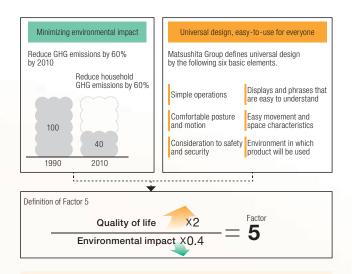
Matsushita is making efforts to achieve sustainable lifestyles by meeting the needs of customers throughout the world, while also minimizing the impact on the global and local environment in all business fields. We call this initiative "Creating Value for a New Lifestyle" and believe that it is our social mission of the 21st century to create the Value in all our business activities.

Among our business activities, those that have the largest impact on the global environment and society are the products and services we provide. Matsushita has endeavored to ensure our products and services not only realize convenient and comfortable lifestyles but are also environmentally-conscious (Eco) and easy-to-use for everyone (UD). We will promote technology development and continue to create and provide Value for a New Lifestyle for the household, from our home appliances to our house designs and the facilities provided.

Matsushita has taken on the challenge of achieving a GHG Factor 5 for One Household (pages13–14). This factor is a specific value standard established as our goal. We aim at achieving the goal in a lifestyle in 2010, by doubling the quality of life and reducing environmental impact to 40% of 1990 levels.

#### Proposing integration of Eco and Ud

We built our Eco & Ud HOUSE on the premises of the Panasonic Center, Tokyo. The house embodies our business visions and strategies while offering an opportunity to experience the kind of lifestyle we propose in the setting of a real house. In January 2006, the house was opened to the public. The basic concept of the Eco & Ud HOUSE is to give people a chance to experience a lifestyle whereby a four-member family can achieve GHG Factor 5 for One Household by around the year 2010. Operating in a wide range of business realms, such as home appliances and houses, Matsushita presents possible comfortable life solutions for household by drawing on our cutting-edge technology and expertise.





Fco & Ud HOUSE

#### Lifestyle model

Four-member, three-generation household with grandmother, father, mother, and daughter. The grandmother is assumed to be physically unimpaired but feels insecure about her future health. The father is assumed to work at home one day a week. The mother is assumed to be a housewife with a job. The family is assumed to live in a two-story, single-family home, with a total floor space of 136.9 m<sup>2</sup> (average for Japan).

#### Forecast of changes in home appliances

For fiscal 1991, the home appliances were assumed to be the latest models of products with a high market penetration level. For fiscal 2011, to reflect lifestyle changes, the household products are assumed to be the latest products recommended by Matsushita regardless of their market penetration level. Additionally, the simulation reflects the increasing number and the size of the products in use.



#### To Forge a Future Society

# Lifestyle in 2010 envisioned by Matsushita

Matsushita has been engaged in the development of products and services that offer comfortable and convenient lifestyles and that have less impact on the environment in order to realize a sustainable society. Some of our initiatives are described below.

\* The products and syste<mark>ms shown here include b</mark>oth those on the market and those under development.

#### Harsh to trespassers but generous to family members



A suspicious individual at the front door is detected by a sensor. The image is automatically transmitted to monitors installed in the living room or kitchen.



unit of the PX500 model.

Environmentally-conscious technology for plasma TVs Improved luminous efficiency and greater integration of LSIs enabled a 37% reduction in annual electric power consumption\*1. An 18% weight-saving\*2 was also achieved through reduced glass materials (PX600 series)



A contactless IC card used as a key can be recognized even if it is in a pocket when the user has baggage in both hands.

- \*1 As compared with the conventional 37v type PX300 model. \*2 As compared with the mass of the conventional 42v type main

A system advising appropriate timing for bathing and laundry to efficiently use energy. (Supporting technology) Developing a Home Energy Management System that comprehensively controls household energy consumption.

#### Role of the house: Place to strengthen family ties



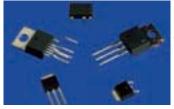
Family members can more easily enjoy a movie on a home theater system with high picture and sound quality and tremendous impact. (Supporting technology) Home theater controller that allows viewers to control centrally not only AV equipment but also lighting and opening and closing curtains, while they are relaxing on the sofa.



Sense of security from being able to see each other wherever family members are in the



Three generations of a family can enjoy cooking in a kitchen equipped with universal design functions. (Supporting technology) Research on universal design in pursuit of both easy posture and ease of use. Advanced dirt resistant technology to ensure easy cleaning



Intelligent Power Device (IPD) can reduce standby power consumption to less than 0.1W. Standby power accounts for approximately 10% of all household power

(UD technology in the near future) One of Matsushita's in-house ventures studies technologies that reinforce and build up people's muscle strength. A wide range of applications are expected such as in nursing care and disaster relief.



#### Matsushita's ideas on UD Goods adapt to people



#### Renovate a grandmother's room



If the grandmother becomes in need of nursing care, the floor plan can be freely altered, for example, establishing a barrier-free bathroom next to her room.

When more lighting is needed to read small print and the fluorescent lamp needs to be changed, the lighting equipment is lowered, instead of having to climb up on a footstool. (Supporting technology) Matsushita is developing products from the customers' viewpoint, such as voice guidance functions that inform life-duration of lamps, easy-to operate remote controls (with child safety lock functioning to prevent mischief by



When a family member goes up stairs at night, light automatically illuminates their feet.



Environmentally-conscious technology for lighting equipment LED lighting has an average luminance equivalent to that of a 40 W incandescent lamp and approximately 26 times longer life. Electric power consumption is also reduced by about 55%. This type of lighting is expected as an ecological future lighting.

# children).

Making everyone in a family

relaxed and refreshed

**Environmentally-conscious** technology for a bathtub Vacuum insulation material (U-Vacua) is used to enclose a bathtub to keep in the heat of the hot water. Gas consumption for reheating was reduced by approximately 80% (as compared with Matsushita's conventional bathtubs)





Refreshing the skin with hot water rich in oxygen. (Supporting technology) Micro-bubble bathingenriched with extra oxygenis an application of the oxygen enrichment membrane developed by Matsushita.

Lighting, bedding, and AV equipment are controlled according to the measured and analyzed heart rate and body movement of the sleeping person. At night, the system encourages natural sleep and makes people awaken feeling refreshed in the morning. (Supporting technology) Matsushita undertakes a detailed study of the effects of the room environment on sleep

#### Using electric power generated at home is another way energy-saving can be achieved



By eliminating the toilet's water tank and using as little as six liters of water for each flush (the least amount used in the industry), water usage was reduced by about 60% (as compared with a Z-type siphon). (Supporting technology) Turn & trap flushing method where a drainage canal is



Heat generated at the time of power generation by fuel cells can be used for hot water supply and drying clothing (page 23).

## For the Global Future

#### To Forge a Future Society

# Offering the convenience of the ubiquitous network society to all people

Matsushita is striving to contribute to the realization of a ubiquitous network society. In addition to entertainment that purveys dreams and inspirations to customers, we would like to serve the need of people across the world through providing security systems for people's reassurance and safety, and through the application of our technologies in education and medical care.

#### What will a ubiquitous network society realize?

What kind of a society do we imagine when we hear a "ubiquitous network society?" This society may represent dream-inspiring, enjoyable lifestyles that allow people to download video and music contents to their TVs or mobile phones, and to enjoy shopping while at home. That is certainly true, but there is also much more.

The ubiquitous network society that Matsushita conceives is a society where people who are not good at operating machines and those with disabilities also have unlimited access to the information they need. It is where children living in areas suffering from a lack of teachers can take classes via a satellite channel. The ubiquitous network society should also realize an environmentally-conscious lifestyle through optimal management of energy usage. This section shows some of Matsushita's ideas for a ubiquitous network society.

#### Society where nobody has difficulties in operating machines

There is no point in connecting varied equipment in a network and making such convenient functions available if no one can make full use of such equipment because it is too complex.

In order to truly realize a ubiquitous network society Matsushita believes that we must overcome the issue of interfaces (monitor screens, operating panels, and other mediums positioned between human beings and machines) by providing ways that enable everyone to easily make full use of the equipment available.

To this end, Matsushita is studying human thinking and behavioral patterns to identify when to give instructions in order to prevent operational mistakes. We are also studying interaction between machines and people and technologies for incorporating ordinary daily movements, such as "hitting," "pulling," and "pushing," into the operation of machines.

#### Society where everyone can lead a secure life

The "Dokodemo\* Door Phone" and "Dokodemo Monitor," released in 2005, have realized security functions provided by a ubiquitous network technology. The "Dokodemo Door Phone" uses a cordless color LCD handset capable of responding to visitors within a range of about 100 m from a user's house. The product is equipped with a safety function to sound the alarm in conjunction with home smoke detectors. "Dokodemo Monitor" is a remote monitoring system using wireless camera. It can be used, for example, to record and transfer images of a baby in a different room to confirm its safety for a caretaker via a TV screen, etc. It can also function to take photographs of an empty house, by sensing an intruder's body temperature and motion, and inform residents of the presence of a trespasser by E-mail via mobile phone.

Matsushita aims to further enhance this product to include functions to confirm whether the front door has been locked and the gas turned off at the mains, as well as for operating equipment such as air conditioners.

\* "Dokodemo" means "anywhere" in Japanese.





#### Optimal management of energy usage in building facilities

Even though we understand that energy saving is important, it is difficult to continue energy-conserving efforts if we cannot implement them easily.

Our Building Energy Management System (BEMS) centrally controls energy consumption in a building through having facilities connected to a network, thereby helping to achieve an optimal in-room environment and energy performance. The system automatically collects energy consumption information by floor and zone and provides data for analysis and assessment of energy conserving effectiveness. Matsushita also provides wide-ranging building management systems to back up the promotion of energy conserving efforts. Matsushita introduced BEMS into some of our buildings and achieved an average of about 10% in energy conserving through operational improvements and facility renovations.

#### Society where people all over the world can receive an adequate education and suitable medical care

As described in The Panasonic Report for Sustainability 2004, Matsushita delivered plasma display panels and broadcasting equipment for a distance education system promoted by Ethiopia's Ministry of Education. Thus far, we have delivered about 9,000 plasma display panels. Currently, this educational system provides business, engineering design, and other practical subjects, in addition to fundamental subjects such as science and mathematics.

In November 2005, the Second World Summit on the Information Society was held in Tunisia aiming at bridging the digital divide between developed and developing countries. Matsushita introduced this initiative in Ethiopia and other efforts involving the distance education system at an exhibition held as a parallel event of the Summit. Our exhibits attracted much attention from participants from various countries as technologies that can provide everyone with an opportunity for education.



In Asia, Matsushita has been involved in an experiment concerning the Asia Broadband Program, promoted by the Ministry of Internal Affairs and Communications in Japan. This experiment aims to improve medical techniques throughout Asia through sharing graphical images of surgical operations. In the February 2006 experiment, graphic images of ultrafine ophthalmologic microsurgery were transmitted in real time from the Asahikawa Medical College to the Singapore National Eye Centre for joint examination.

In ophthalmic surgery "depth" is, of course, very important, in order to faithfully reproduce the operating conditions of an ophthalmology unit—not only as a high-definition images but also as 3-dimensional images. Matsushita's 3D high-resolution image system enables the reproduction of images that closely mirror those seen by the naked eye. The world's first international transmission experiment of graphic images of ophthalmic surgery was successful thanks to Matsushita's advanced imaging technology.

#### Home power line communications technology that enables instant connection to a network

Although the ubiquitous network society sounds very convenient, it will take significant cost and labor if new communication cables need to be installed in every house in order to receive its benefits.

In 2005, Matsushita put its High Definition Power Line Communication (HD-PLC) technology into practical use and started to ship related products. With the HD-PLC technology, electric devices can be connected to a network by using the electrical circuit already installed in a house. Matsushita has named our PLC as HD-PLC because it has realized not only a high-speed PLC, but with transmission speeds up to 190 Mbps. This speed enables fast transmission of high-definition images and other types of large data, as well as voice data for telephones, where delays may cause problems. The greatest advantage of HD-PLC is that no new cable laying work is needed and all power outlets can become points of connection. The user simply plugs equipment with PLC functions into any AC power outlet to use home networking.

HD-PLC adopts the Advanced Encryption Standard selected by the National Institute of Standards and Technology of the US Department of Commerce, providing a high level of security, and is designed to be used without personal computers for user-friendliness.

Matsushita strives to realize a secure, safe, and comfortable ubiquitous network society by encouraging manufacturers of PLC-related products to adopt HD-PLC as the core technology for networking, and providing wide range of products such as HD-PLC adapters and other related products to consumers.

## For the Global Future

#### To Forge a Future Society

# Moving towards a safe, comfortable and, environmentally-conscious motoring society

To realize safer and more comfortable driving, and a more environmentally-conscious motoring society, it is essential that various related industries collaborate to develop rules and system standards. At Matsushita, making optimal use of our advanced electronics technologies, we are developing traffic systems that help realize safe and comfortable transportation that imposes the minimum impact on the environment.

#### Building a safe, comfortable, and environmentally-conscious motoring society through ITS

ITS\*1, with its cutting-edge information and communication technologies, as well as control technologies, has been developed as a solution for various traffic problems, including accidents, traffic jams, and exhaust emissions. Of the various advanced systems and technologies that constitute ITS, ETC\*2 is particularly getting popular in Japan. Today, in Japan, the number of vehicles with onboard ETC transponders has reached 11 millions. The percentage of ETC users among toll-road users is sharply increasing to approximately 60%. Drivers benefit from the ETC system because they are not required to stop at the tollgates. Also, the system is effective in mitigating traffic congestion at the gate areas. In fact, in the vicinity of tollgates, CO<sub>2</sub> and NO<sub>x</sub> emissions have been reduced by approximately 30%\*3. Consequently, ETC is considered to have deterrent effect against air pollution and global warming. In addition to supplying advanced onboard transponders, Matsushita develops and supplies tollgate systems, thus contributing to the progress of such systems, which are expected to become even more popular.

Car navigation systems, widely used in Japan today, often incorporate VICS<sup>\*\*</sup> receivers, which provide real-time road traffic information and thus help facilitate traffic flow. In addition to incorporating a VICS receiver, Matsushita's car navigation system, "Strada," stores data of approximately 2,200 accident-prone areas in Japan. When a vehicle approaches such areas, Strada emits an alarm to the driver through both voice and image display to prompt the driver to be alert and thereby reduce the risk of an

As a board member of the World Congress on ITS, Matsushita actively participates in formulating international standards for related systems and equipment. As a leading enterprise in the area of ITS, Matsushita is striving to build more environmentally-conscious traffic systems for safer and more comfortable driving.

- \*1 ITS: Intelligent Transport Systems
- \*2 ETC: Electronic Toll Collection System
- \*3 Source: Ministry of Land Infrastructure and Transport
- \*4 VICS: Vehicle Information and Communication System



### Communication technologies to protect children and the elderly from accident and

In collaboration with governmental agencies and automakers, Matsushita has been committed to R&D concerning accident prevention systems using IC tags. In this system, roadside sensors transmit signals to drivers whenever the elderly and children holding IC tags approach the sensors. Matsushita is also testing a device that detects vehicle positions with optical beacons used for traffic analysis, and informs drivers whenever other vehicles are approaching accident-prone crossings.

Another system that Matsushita has been marketing is an emergency notification system for children. When children on the street feel that they are in danger, they can press the button of an emergency system installed at the roadside. When the button is pressed, the system begins to sound an alarm and flash a light. At the same time, the system transmits both audio and video information to an emergency center, where operators are ready to respond to the child who pressed the button to take appropriate relief measures.



#### **HELPNET** for prompt lifesaving

At the site of a traffic accident, quick arrival of rescue team determines the life-saving rate. In collaboration with Toyota Motor Corporation and several other companies, Matsushita has launched an emergency report service called "HELPNET" (operated by Japan Mayday Service, Co., Ltd.). In an emergency, drivers can call for a rescue by pressing the in-vehicle emergency button of HELPNET system. The vehicle location is automatically detected with GPS\*5. Moreover, whenever an airbag deploys, the HELPNET system automatically calls the HELPNET operator, who immediately contacts the driver. If there is no response, the operator assumes that the driver is unconscious and calls up an ambulance on the driver's behalf.

\*5 GPS: Global Positioning System



Toyota Motor Corporation's hybrid electric vehicle LEXUS (GS450h) is powered in part through nickel-metal hydride rechargeable batteries developed by Panasonic EV



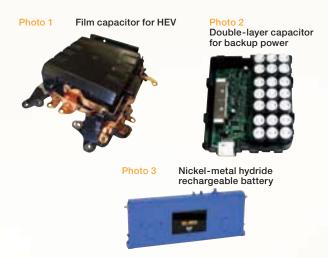
#### Contributing to the progress of eco-car

As an effective tool to mitigate air pollution and global warming, growing attention have been focused on hybrid electric vehicles (HEVs) that emit less exhaust gasses. Reducing the weight of the onboard units for hybrid vehicles is effective in improving fuel efficiency and thereby further reducing CO<sub>2</sub> emissions. Through effective use of electronic technologies, we are developing advanced onboard components, thereby contributing to the further progress of eco-car.

One such component is a film capacitor for HEV that stabilizes the power voltage of electric motors mounted in the engines of HEVs. We have produced a capacitor element by depositing metals on thin films in an extremely precise pattern, and it offers both high voltage operation and safety. The element has a long-life and is maintenance-free. Therefore resource conservation and reduction in size and weight were realized (Photo 1).

Another example is a double-layer capacitor for backup power, a power source unit that enhances the safety of an electronically-controlled brake. Using our original battery electrolyte and high-capacity electrode technologies, we have developed a long-life capacitor for backup power, including a 25% reduction in weight from our conventional model (Photo 2).

Nickel-metal hydride rechargeable batteries for HEVs supply power to vehicles' electric motors. In 1996 Matsushita and Toyota Motor Corporation jointly established Panasonic EV Energy Co., Ltd., a manufacturer dedicated to producing battery packages for HEVs. Since then, the company has continued developing and producing highly reliable long-life batteries. Using the accumulated expertise the company has led to a reduction in the number of batteries necessary for each vehicle, giving a 15% space-saving and a 25% weight reduction compared to conventional batteries of the company (Photo 3).



<sup>\*</sup> The photos show models different from those mounted in Toyota Motor Corporation's LEXUS model (a photo above left).

#### Addressing roadway air pollution

In large cities where traffic jams create serious problems, many projects are under way to construct underground highways. From such underground structures, however, polluted air needs to be discharged above ground through ventilation systems. Since exhaust gases contain NO<sub>x</sub> and other harmful substances, it is imperative that appropriate measures be taken to protect the health of drivers and local residents.

In the past, removing NO<sub>X</sub> (denitrification) from highways was difficult because of changing levels of NO<sub>x</sub> concentrations and atmospheric temperature. Matsushita has developed a denitrification system to remove NO<sub>2</sub> which is particularly harmful to human health directly. We have already exchanged contracts to supply the system to the underground section of the Central Loop Shinjuku Line of the Tokyo Metropolitan Highway (The completion of the tunnel is scheduled for March 2007). This will be the first denitrification system in Japan to be installed within a tunnel

Matsushita is also developing a compact and easy-to-install denitrification system for road crossings and underground parking lots, where ventilation of exhaust gases is particularly important.

#### Business ECO bike, featuring universal design, creates more job opportunities

Our electric bicycle, the "business ECO bike," is equipped with our original electric motor unit, torque sensor, and high-performance lithium-ion battery. With these advanced components, the ECO bike has enhanced performance sufficiently to act as a substitute for motorcycles for specialized uses. For instance, the electric bicycle can be used for mail and newspaper deliveries, police patrols. Replacing 90 cc motorcycles with the bicycles helps curtail annual CO<sub>2</sub> emissions by 542 kg per unit. To date, we have supplied the bicycles to private railway companies as rental cycle for commuting and sightseeing and the Kyushu Railway Company for the Rakuchari (comfortable bicycle). As a new transport tool, our electric bicycles help reduce the impact on the urban environment.

Moreover, the electric bicycle features easy pedal operations. Since riders do not need a license, this also helps provide job opportunities to greater numbers of people.

#### To Forge a Future Society

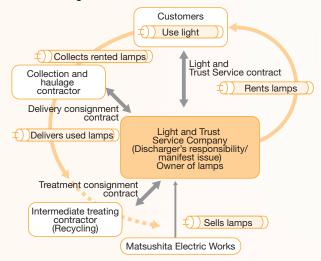
## Developing new services and advanced products to help create a sustainable society

Matsushita has commenced a new service to sell lighting "functions" instead of lighting "equipment" so as to promote thorough resource recycling. Other innovative initiatives that we are undertaking include contaminated soil cleanup services using microbes, and the development of advanced equipment incorporating highly specialized functions.

#### New business to sell lighting "functions" rather than "equipment" Light and Trust Service

Today, most of the fluorescent lamps discarded from factories and offices after their service life are simply crushed and land filled. In April 2002 Matsushita commenced a new service of leasing fluorescent lamps, rather than selling them (Light and Trust Service: Chart 1). In this business, a service company established by Matsushita collects used fluorescent lamps to ensure appropriate treatment of the mercury and other harmful substances contained in the lamps. As of March 2006, 425 companies and 3,600 business sites utilize this lease service. By increasing the number of enterprises that use this service, Matsushita is now promoting the recycling of fluorescent lamps in Japan.

**Light and Trust Service** Chart 1



#### Soil and groundwater remediation service using microbes

Matsushita provides an advanced bio-remediation service that makes use of the microbe living in the soil as a method of remediating soil/groundwater contaminated by chlorinated volatile organic compounds (VOCs: tetrachloroethylene, trichlor ethylene and chlorinated hydrocarbon). In this service we put "Amteclean," a nutrient salt made of natural coconut fibers, into the soil/groundwater. It activates VOC decomposition functions of the microbes living there. Although this new method requires a longer period than excavating contaminated soil and replacing it with clean soil, it has less effects on ecosystems and is more

It is essential that the decomposing bacteria are present in the soil/groundwater for its remediation. Although conventional methods have been unable to determine the types of

decomposing bacteria living in the soil/groundwater or to measure their amount, Microarray Technology\*1, developed in June 2005, allows us to determine the presence of suitable decomposing bacteria and identifying 22 bacteria types in a single test. This technology provides highly accurate cleanup services at a lower cost.

\*1 Developed in collaboration with Gifu University and the National Institute of Advanced Industrial Science and Technology.

# Development of energy-efficient, compact

It is estimated that electric motors, which are incorporated in a huge range of equipment, are responsible for 51% of the total power consumption in Japan\*2. In recognition of their widespread use, Matsushita focuses on improving the energy efficiency of electric motors.

In 2005, in collaboration with the New Energy and Industrial Technology Development Organization (NEDO), Matsushita embarked on the development of a new magnet that has 1.5 times the magnetic force of conventional magnets\*3. Since this new magnet enables downsizing and improves motor efficiency by approximately 10% compared to our conventional magnets, we plan to use the new magnet in our 15-50 W motors for air conditioners, heaters, copying machines, printers, and other applications. If we use 40 W motors incorporating new magnets in 7.5 million home appliances, this would reduce CO2 emissions by 28,000 tons.

- \*2 Source: Outline of Power Demand by Agency of Natural Resources and Energy.
- \*3 In collaboration with Nagasaki University, Osaka University, and Shizuoka Institute of Science and Technology.

#### Welding machines to replace the skills of experienced workers

Welding operations require particular expertise, since welding methods and conditions such as voltage and current should be carefully controlled according to the material to be welded. In Japan, since the so-called baby boomers are expected to retire within a few years, a decrease in the number of experienced technician is likely to pose a grave concern.

In response, Matsushita has stored over 100,000 items of data on welding conditions and currents, and sorted these data by material types, such as carbon steel, aluminum, and stainless steel. We then analyzed experts' techniques of controlling the current and voltage, as well as various welded joint shapes. By carefully digitalizing such data, Matsushita has developed welding machines that can reproduce these experts' techniques. Using these new machines, welders can learn the highly skilled techniques of experts in a relatively short period. Moreover, Matsushita has reduced the "spatter" often generated when welding to below one-third of conventional levels, thus improving the workplace environment.

#### To Forge a Future Society as a Respected Corporate Citizen



Matsushita has been committed to its businesses outside Japan, maintaining its basic policy of contributing to the development of each host country by considering our group companies as local enterprises. We hope to serve each host country as a respected corporate citizen, since this is crucial for developing our business outside Japan, the business area that is expected to be Matsushita's growth engine.

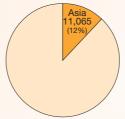
Users of a well water pump. and Koichi Mizuno (left), a water pump designer

### Asia

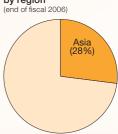
Matsushita first launched its business outside Japan in 1935, when the company dispatched its representative to Manila, the Philippines. His mission was to develop a market outside Japan through basic leawork.

In 1961 Matsushita established National Thai Co., Ltd. (now Panasonic (Thailand) Co., Ltd.), the first manufacturing company outside Japan founded after World War II. Since then, Matsushita has established a number of subsidiaries in Asia, particularly in Southeast Asian countries, such as Malaysia and Indonesia, and promoted the localization of these enterprises. Today, Matsushita group companies in this region are committed to production, marketing, and procurement under the leadership of Panasonic Asia Pacific Pte. Ltd., our regional headquarters located in Singapore.

#### Sales by region (100 million yen; fiscal 2006)



#### Percentage of employees by region (end of fiscal 2006)



#### Indonesia Water pumps release people from heavy labor

Water is essential not only for our survival, but also for maintaining hygiene. In Indonesia, which has the fourth largest population in the world, many of the 220 million people living on the country's 18,000 islands do not have access to clean water supply systems. So, many people draw water for washing and bathing from shallow wells of about 10 meters in depth. In most cases this is the task of women and children, and it is heavy labor for them—even though the wells are relatively shallow.

PT Panasonic Manufacturing Indonesia (PMI), Matsushita's manufacturing subsidiary in Indonesia, commenced manufacturing water pumps in 1988. Today, about half of the households using pumps employ PMI's products, which are affordable and of good, stable quality. Since 55% of Indonesian households have access to a power supply of not more than 450 W, the water pumps are designed to consume little power. Moreover, PMI has built a nationwide marketing and distribution network to supply its products to those who need pumps on almost all the islands. This is why so many households use PMI's pumps throughout the country.

#### Indonesia

#### Matsushita Gobel Education Foundation contributes to developing engineers and local industries

Matsushita Gobel Education Foundation offers young Indonesians opportunities to learn new technologies. In Indonesia, approximately 60% of households monthly spend 110 dollars or less, so providing scholarship is essential for developing young engineers, who will underpin national development in the future.

The Foundation was established in 1978 with a fund of one million dollars donated by the founder, Konosuke Matsushita, who was deeply impressed by the enthusiasm of Dr. Th. Mohammad Gobel in fostering young engineers to help promote the country's industrial development. Dr. Th. Mohammad Gobel was Matsushita's business partner with whom we established our first joint venture in Indonesia, PT. National Gobel (now PMI). The Matsushita Gobel Education Foundation operates the Matsushita Gobel Institute, which is dedicated to nurturing young engineers.

The Institute operates three educational programs: "Management School," "Techno-School," and "Mold and Die School." In addition, there is a department dedicated to analyzing management activities. The Institute annually holds 40 to 50 seminars, including those held under contract with the Japan International Cooperation Agency (JICA), and other organizations outside Indonesia. A total of 1,500 people annually participate in these courses. To date, the institute has received a total of 57,663 people from 233 companies, including small and medium-sized local businesses. Currently, the institute plans to receive even more trainees from local businesses.

#### To Forge a Future Society as a Respected Corporate Citizen



Training at Matsushita Gobel Institute

#### Malaysia Promoting energy conservation at factories as CDM projects

CDM\* is a method authorized by the Kyoto Protocol, whereby industrialized nations undertake initiatives to reduce GHG emissions in developing countries, aiming at helping to achieve sustainable progress in developing countries and acquiring emission credits towards the industrialized nations' CO2 reduction targets.

To introduce global warming prevention technologies developed in Japan to our factories in developing countries, we plan to register energy conservation initiatives to be taken at our 11 Malaysian factories as CDM projects and to acquire 16,000 tons of annual emission credits. In February 2006 Matsushita received certification for this project from the Japanese government. Currently, we are working to receive certification from the Malaysian government and to register this project with the United Nations.



#### **Thailand** Demonstrating the value of Green Products

Matsushita participated in the Eco-Products International Fair 2005, held in October 2005 by the Asian Productivity Organization (APO) and the Federation of Thai Industries, with the aim of promoting environmentally-conscious designs and products in Thailand. Visitors to the Fair paid keen attention to our environmentally-conscious AV products, hydrofluorocarbon (HFC)-free refrigerators, tilted-drum washers/dryers, and wind/solar hybrid power, Kaze-Kamome. These products were also introduced by the local media.



Eco-Products International Fair 2005 (Thailand)

# Building a bridge between Indonesia and

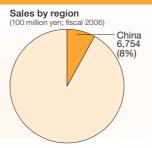
Since the founding of PMI in 1970, PMI has been helping improve Indonesians' standard of living through our commitment to the production and marketing of electrical appliances. Our company has received high acclaim as a model company for Indonesia-Japan partnerships. I am determined to continue

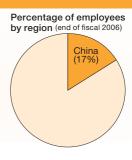
my efforts to further promote friendship between our two countries through my activities at PMI, Indonesia-Japan Friendship Association, and the Indonesia-Japan Economic Committee, for which I am serving as the secretary-general.

> Director, PT Panasonic Manufacturing Indonesia



## China





Matsushita embarked on its business in China in 1978, when our founder, Konosuke Matsushita, promised China's then-Deputy Prime Minister, Deng Xiaoping, who was on a visit to Japan, that Matsushita would help develop the electronics industry in China. Since then, China has consistently been a key region in our global business strategy. In November 2005, the Chinese government honored Panasonic Corporation of China, our regional headquarters, with the "China Best Corporate Citizen Prize," in recognition of the company's long-standing corporate citizenship activities.

# Technological and management support to Chinese service stations

Matsushita offers technological and managerial support to approximately 700 home appliance service stations in China. When consumers ask Matsushita to repair their home appliances via the Internet or call centers, we dispatch service staff members across the country to support the entire repair processes. Our efforts have been highly appraised by Chinese customers; in our survey, almost all respondents answered that they were well satisfied with our services.

# Promoting employment of disabled workers, under the slogan "Equality, Participation, and Sharing"

In collaboration with disabled people's associations, Matsushita organized explanatory meetings to recruit disabled workers in various cities, including Beijing, Shanghai, Zhuhai, Wuxi, and Suzhou. As of March 2006 approximately 150 disabled workers are serving at group companies in China. Such employees are actively committed to their individual tasks, ranging from production to quality control, and financial administration.

In China, approximately 10% of power is consumed by lighting. To establish energy efficient lamp standards and to promote the use of such lamps, in 1996, the Chinese government launched the China Green Lights Project. In the same year, Panasonic Lighting (Beijing) Co., Ltd. (PLBC) began participating in this project, in which PLBC installed 150,000 energy-efficient fluorescent lamps in subways and other facilities. In fiscal 1996, PLBC built the first plant in China to treat discarded lamps. In fiscal 2006, the plant treated approximately 300,000 fluorescent lamps after the end of their service lives.

Regarding water conservation, the production of cathode ray tubes (CRTs) entails particularly large volumes of water. For example, Beijing Matsushita Color CRT Co., Ltd. (BMCC) consumes approximately 30% of all the water used in our factories in China. In December 2005 BMCC introduced a cutting-edge facility to recover wastewater and recycle it into pure water. The facility is expected to annually recycle approximately 34% of all wastewater. In fiscal 2007 BMCC plans to introduce another water-recycling facility.



An employee with an auditory disability (left) working at Matsushita's battery production company

# Focusing on reducing CO<sub>2</sub> emissions and water consumption

As a result of the rapid growth of the Chinese economy, the country is currently confronted with serious power and water shortage. Energy and water conservation, therefore, are pressing issues

In China, Matsushita operates approximately 60 plants. In fiscal 2006, these plants emitted 790,000 tons of  $CO_2$ ; this amount being 81% higher than the level in fiscal 2001. Since  $CO_2$  emissions are predicted to increase in coming years, Matsushita took initiatives in fiscal 2006 to curtail  $CO_2$  emissions by approximately 50,000 tons in line with the Three Year Energy Conservation Plan (pages 21–22).

# Building an outstanding corporate culture through human resource development

BMCC was founded in 1987, as Matsushita's first joint venture in China, based on the proposal of our founder, Konosuke Matsushita, and China's then-Deputy Prime Minister, Deng Xiaoping. At BMCC, which produces cathode ray tubes, we firmly believe that excellent technologies and marketing performance can only stem from a healthy corporate culture. Keeping this

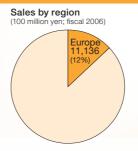
in mind, we are committed to developing a corporate culture that places priority on friendly human relations and mutual respect. I believe that our excellent teamwork is one of the most valuable assets that we possess.

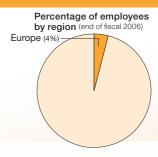


Fan Wenqiang, Vice President, Beijing Matsushita Color CRT Co., Ltd.

#### To Forge a Future Society as a Respected Corporate Citizen

# Europe





In 1962, Matsushita established its first sales company in Hamburg , Germany. During the 1970s, Matsushita launched fully-fledged production activities in Europe. Recent years have seen growth in production activities in East European countries, such as in the Czech Republic and Poland. Under the leadership of Panasonic Europe, Ltd., our regional headquarters in the U.K., Matsushita commenced corporate social responsibility (CSR) activities in Europe earlier than in other regions.

#### Czech Republic Enhancing the professional levels of employees in the electronics industry

Panasonic AVC Networks Czech, s.r.o (PAVCCZ) commenced its operations in 1997, manufacturing CRT TVs for the European market. Over the past five years, however, mainstream production has rapidly shifted from CRT to plasma and LCD televisions. Improving the technical skills of its employees has therefore been an urgent task.

In response to this situation, PAVCCZ established the Panasonic School in October 2005, with assistance from the Czech government and the European Social Fund (ESF), which is dedicated to promoting employment opportunities across Europe. With support from the University of West Bohemia (Pilsen, Czech Republic), which prepares curricula and provides lecturers, the Panasonic School offers programs designed to enhance the professional levels and expertise of employees.

In addition to PAVCCZ employees, the Panasonic School is also open to employees of other companies. In the first term, over 200 candidates applied to the school, which has a capacity of 115. Enrolled applicants, who usually work in a two-shift system, attend school during their time off over a period of two years (four terms). In each term, which comprises 20 weeks, students study subjects such as electronics, basic economics, quality control, or work safety. Students can also take optional courses, including computing and English. To help busy students who cannot attend as many classes as they would like, the PAVCCZ Personnel Department, which also carries out administrative work for the school, is helping to increase home study hours by developing an e-learning system.

#### Sponsoring Torino 2006 Paralympic Winter Games as an official partner



Professional-use broadcasting equipment used at the Paralympics in Torino

Matsushita has been serving as one of the Official Worldwide Olympic Partners since 1988 (Calgary and Seoul Games), Matsushita provides high-end AV equipment and broadcast systems, enabling a worldwide audience to experience these impressive and exciting scenes. In 2006.

Matsushita also sponsored Paralympic Winter Games held in Torino, as an official partner.

#### European initiatives to promote the Matsushita Group Code of Conduct

In January 2005 Matsushita revised its Code of Conduct, to reflect the advancing concepts of CSR. During fiscal 2006, the company took various proactive initiatives to promote the revised Code of Conduct among its employees throughout the world. In Europe, Matsushita has operations in 15 countries where a total of 11 languages are spoken, and so the company translated the Code of Conduct into each respective language, promoting its message using e-learning systems, and so forth.



E-learning program in Europe

#### Disseminating European trends, an advanced region in terms of CSR

To share the latest information with Matsushita Group's staff members who are committed to promoting CSR activities worldwide, I monitor and report on any CSR developments in the EU, where people take a particular interest in CSR. To collect this

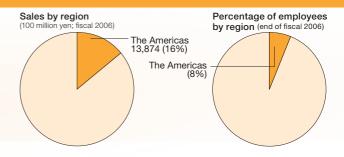
information, I attend specialized EU workshops, and develop contact with EU decision makers and other companies involved in CSR. I am very glad to see that a real CSR culture is developing

within Matsushita.



Marie - Hélène Dubray, European Legal & International Affairs Panasonic Europe, Ltd.

## The Americas



In 1951, our founder, Konosuke Matsushita, embarked for the U.S., as his first overseas inspection tour, with his firm belief in the importance of managing business from a global perspective and his great ambition to forge new business. His trip marked an important milestone for Matsushita's business expansion on a global basis. Today, in both North and Latin America, Matsushita carries out its extensive business under the leadership of its regional headquarters, Panasonic Corporation of North America and Panasonic Corporation of Latin America. Matsushita is also committed to its corporate citizenship activities in these regions. For example, our "Kid Witness News" (a program to support video production by elementary and junior-high school students), initiated in the U.S. in 1988, has expanded to 14 countries around the world.

#### **United States** Collection of waste electronic products and promotion of energy-efficient products

The United States Environment Protection Agency is promoting "Plug-In To eCycling," a program whereby consumers, local governments, retailers, and manufacturers of consumer electronics share responsibility for the recycling of waste electronic products. The objectives of this program are to improve the recycling rate of waste electronics, advance recycling technologies, develop markets for recycled materials, and enhance consumer awareness of the importance of recycling.

Matsushita joined this program in 2002, and through 2005, has sponsored 1,070 events for collecting waste products in 27 states across the U.S. Through these events, we have helped collect approximately 10,100 tons of items for recycling.

Matsushita also participates in Energy Star\*, a program designed to promote energy-efficient products so as to reduce CO<sub>2</sub> emissions, under the leadership of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). In fiscal 2006, we launched 376 models that were certified as Energy Star products.

\* A program for promoting energy-efficient products, led by the U.S. EPA and DOE (www.energystar.gov/)

# Enhancing customer satisfaction by improving service at repair stations

Panasonic do Brasil Ltda., which produces consumer electronics and batteries, is committed to improving customer satisfaction, based on the recognition that many of our customers select brands in accordance with the levels of service quality. To improve our repair services, Matsushita ranks individual service shops in four levels according to their speed and quality of service, while at the same time supporting their technical improvement.

To improve the technological levels of our service shops and to enable repair of new products, such as DVD recorders etc., we have developed e-learning programs and holds technical contests. As a result, the ratio of service shops that can complete repair work within 48 hours increased from 60% in fiscal 2004 to 80% in fiscal 2006.

At the same time, Matsushita is committed to its early-stage quality control system to improve new products in their early stages by strengthening prototype field tests.

#### Mexico

#### Promoting children's awareness of the importance of environmental protection at exhibitions

In 2005, Panasonic Communications de Mexico, S.A. de C.V. participated in two exhibitions, Expoambiente and Eco Tijuana, both under the theme of the environment. At these two

exhibitions, we promoted children's awareness of environmental protection through illustrations, games, and eco-goods. At Expoambiente, the company received an award in recognition of its excellent displays.



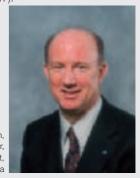
Matsushita's display at Expoambiente

#### Vision and leadership for environmental sustainability management

Investments in environmental improvements require vision and leadership: They do not always pay. Despite intensifying global competition and significant product price erosion, I have seen this leadership repeatedly demonstrated, particularly in the achievement of our lead-free solder project well in advance of adoption of RoHS directive (page 17).

In North America, we played a leading role in establishing the Rechargeable Battery Recycling Corporation (RBRC), and are currently expanding this voluntary program to Canada.

David A. Thompson, Senior Group Manager, Corporate Environmental Department, Panasonic Corporation of North America



### Third Party Opinions



April 2006, Sweden

#### Sustainability Analysis Report on Matsushita Group Activities

#### Results of analysis

The Natural Step judges that the Matsushita Group well understands the important issues needed to achieve sustainable development for its stakeholders and the company. We highly regard Matsushita's introduction of Clean Factories, green procurement, and environmental management systems on a global scale in fiscal 2006. The greatest challenge Matsushita currently faces is to foresee what products and services people will need in a sustainable society and for example reduce CO2 emissions at the customer's use stage. Matsushita has successfully achieved its Green Products (GP) development ratio target set for fiscal 2011 of environment-conscious and energy-efficient products. However, given the anticipated market expansion in China and other countries, Matsushita's continued efforts are indispensable, as it is feared that global CO2 emissions will increase. In light of this, Matsushita's household fuel cell cogeneration system, Wind Seagull, and Eco and UD HOUSE, which realized GHG Factor 5 for the household, are all noteworthy. Matsushita is also highly evaluated for aiming to correlate its V Products and Superior GP. The biggest challenge in Matsushita's social sustainability work is to keep track of labor conditions at manufacturing plants and suppliers in China as accurately as it does for domestic sites, and to thoroughly implement the Code of Conduct.

#### Suggestions for Improvement **Environmental Strategies**

Matsushita maintains a firm commitment to sustainable development on the part of top management, has incorporated an environmental viewpoint into its vision and policies, built sound foundations for improvement, and achieved continuous results. In 2001 Matsushita set out its vision of what roles the company could play in a sustainable society. From a long-term viewpoint, Matsushita should seek to further evolve this vision. It is necessary to build strategies for improving the quality of life of people in a sustainable society. In this respect, the company's endeavors to apply the Factor X concept even to cities and to the lifestyles of people are very progressive.

#### Social Aspects

The CSR challenges faced by a global company are profound. Matsushita's labor conditions in Japan are relatively good in comparison with international standards and a wide range of measures are implemented. Matsushita has shifted its production base to China where currently 16% of all its employees are working. Given that China faces various social problems resulting from the rapid progress of its economic development, environmental destruction, and the widening disparity between rich and poor, it is imperative for Matsushita to set a clear CSR vision, a strategy and action plan on a global level. It is also hoped that Matsushita's social and environmental policies can be fully integrated.

#### **Products and Services**

The Natural Step proposes that Matsushita should extend its definition of Super GP beyond the concept of reducing the impact of existing products on the environment and instead do "backcasting" based on our Four Principles for a sustainable society. It is convenient to put emphasis on satisfying the basic human needs defined by Manfred Max-Neef. They are: subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom. We expect Matsushita to hammer out Super GPN Products that can synergistically satisfy the human needs of its customers around the world.

#### Stakeholders

Important stakeholders for Matsushita include employees, suppliers, customers, and society itself. To customers and society, Matsushita discloses information that covers wide-ranging areas. However, company disclosure on employees' and supplier's working hours, safety and health, regarded as important CSR factors in Japan and overseas, are not sufficient. It is necessary to confirm and conduct audits to ensure Matsushita's guidelines and tools are properly implemented at suppliers' sites. It is also desirable that collaboration is strengthened through the sharing of Matsushita's vision. We expect that the company will disclose these achievements in the future.

#### Resource Dependence

Matsushita's effort to switch to sustainable raw materials is being continuously implemented. Matsushita is highly regarded for its compliance on heavy metals and chemical substances under the EU's RoHS Directive-ahead of time. However, Matsushita still handles vast amounts of other persistent chemical substances and it remains important to cooperate with suppliers to reduce such usage. Currently, discussions are being staged on regulations requiring the switch to sustainable raw materials, and on the establishment of effective recycling systems. It is necessary for Matsushita to be actively involved in the formulation of laws and regulations for sustainable development as a front runner in Japan. Taking the initiative in this way will, in turn, help the company boost its international competitiveness.

#### **Energy and Distribution**

Matsushita announced its policies to improve energy efficiency in the development and production of energy-saving products and to change all its company cars and transporters into eco-cars. The company has also introduced pioneering approaches to reducing CO2 emissions, such as through its "Lights-Out" activities. However, it is difficult to achieve further significant reduction in CO2 emissions without taking the step to shift to renewable energy. We recommend Matsushita to launch a flagship project of converting one of its existing factories into a fossil fuel-free factory.

Agneta Wannerström

Analyst, Sweden Branch, The Natural Step International

Comment of the Founder

gneta Wannerto

Visionary and powerful leadership evolves from a combination of characteristics, some of the most important being; communication of a clear vision, boldness and endurance to walk in the direction of the vision in spite of all resistance in the system and to go on in spite of all temptations to let go and resign to lower benchmarks. Matsushita has, since its foundation, had service to society at large as its major benchmark. This is still the case. Since The Natural Step began to work with Matsushita in 2001, we have been impressed by Matsushita's systematic progress towards their vision.

Karl-Henrik Robert

Founder of The Natural Step International

<sup>\*</sup> Manfred Max-Neef: A founder of the NGO, the Center for Development Alternatives, which promotes the economic advancement of developing countries.

#### Partnership with the International NGO, the Natural Step

Matsushita entered into partnership with the Natural Step, an international NGO, in 2001, and has enhanced initiatives to establish a sustainable society and promoted operations to this end. We select the Natural Step as a partner because it provides clear-cut guidelines to realize a sustainable society, and it also maintains a positive stance toward social revolution being achieved through corporate activities.

\*Refer to page 18 for a message on environmental sustainability management from the Natural Step U.K.

#### Sustainability Analysis Using the Natural Step Framework

By Backcasting, a methodology for assessing current performance with regard to a desired future outcome in a sustainable society, the Natural Step analyzes the implementation of plans by the organization under review, based on the principles of a sustainable society (the Four System Conditions).

#### **Analysis Process**

- 1. Collect information from Matsushita's reply to questionnaires on social and environmental vision and activities, and (disclosed and undisclosed) support documentation.
- 2. Collect further information, through dialogues, on the major directions and categories of Matsushita's social and environmental performance and on its relationships with suppliers.
- 3. From the above information, flows of resources and processes are identified. Based on the above, Matsushita's sustainability can be analyzed.
- 4. Feedback is then provided to Matsushita from a comprehensive viewpoint concerning the opportunities and risks for the company in the process of shifting towards a sustainable society.



In Stockholm (March 2006)

#### The Natural Step

The international NGO having branches in 12 countries was established in 1989 by a Swedish specialist in infant cancer, Dr. Karl-Henrik Robèrt. The Natural Step identified, in consensus with scientists, the key requirements for a sustainable society, which are defined as the "Four System Conditions." Many environmentally-advanced countries and international business corporations utilize these conditions since they give insight and guidance in how to formulate sustainability strategies.

#### The Natural Step's Four System Conditions

In a sustainable society, nature is not subject to systematically increasing:

- 1. Concentrations of substances extracted from the Earth's crust
- 2. Concentrations of substances produced by
- 3. Degradation by physical means and in that society...
- 4. People are not subject to conditions that systematically undermine their capacity to meet their needs.

Website: www.naturalstep.org/

### Corporate profile (As of June 28, 2006)

Matsushita Electric Industrial Co., Ltd.			
Head office:	1006 Kadoma, Kadoma City, Osaka 571-8501, Japan	Tel: +81-6-6908-1121	
Date of incorporation:	December 15, 1935		
Date of foundation:	March 7, 1918		
Representative:	Fumio Ohtsubo, President		
Number of employees (consolidated):	334, 402 (as of March 31, 2006)		
Fiscal 2006 consolidated performance			
Net sales:	JPY 8,894.3 billion		
Operating profit:	JPY 414.3 billion		
Net income:	JPY 154.4 billion		
Matsushita website:	Panasonic.net		
More information on financial performa	nce is available at our IR info website at: ir-site.panasoni	c.com/	

# Panasonic ideas for life







